

Hardness as a Spectral Peak Estimator for Gamma-Ray Bursts

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ABSTRACT

Simple hardness ratios are found to be a good estimator for the spectral peak energy in Gamma-Ray Bursts (GRBs). Specifically, a high correlation strength is found between the νF_ν peak in the spectrum of BATSE GRBs, $E_{p,obs}$, and the hardness of GRBs, HR_H , as defined by the fluences in channels 3 and 4, divided by the combined fluences in channels 1 and 2 of the BATSE Large Area Detectors. The correlation is independent of the type of the burst, whether Long-duration GRB (LGRB) or Short-duration (SGRB) and remains almost linear over the wide range of the BATSE energy window (20–2000 KeV). Based on Bayes theorem and Markov Chain Monte Carlo techniques, we also present multivariate analyses of the observational data while accounting for data truncation and sample-incompleteness. Prediction intervals for the proposed HR_H – $E_{p,obs}$ relation are derived. Results and further simulations are used to compute $E_{p,obs}$ estimates for nearly the entire BATSE catalog: 2130 GRBs. These results may be useful for investigating the cosmological utility of the spectral peak in GRBs intrinsic luminosity estimates.

Key words: Gamma-Rays: Bursts - Gamma-Rays: observations

1 INTRODUCTION

One of the most widely used spectral parameters in the studies of GRBs is the time-integrated νF_ν spectrum peak energy of these cosmic events. Since the early 1990's there has been a growing trend (e.g. Liang 1989) to plot the GRBs spectra in the form of $E^2 dE$ or νF_ν vs. energy, where F_ν is the spectral flux at the frequency ν . This has the advantage of making it easy to discern the energy of the peak power from the burst. The νF_ν plot of many of the bursts' spectra shows a peak which is denoted by $E_{p,obs}$.

Among all the gamma-ray observatories that have detected GRBs, the Burst and Transient Source Experiment (BATSE) onboard the now defunct Compton Gamma Ray Observatory (CGRO) has provided the largest GRB database, consisting of observational data for 2704 GRBs. The $E_{p,obs}$ of BATSE GRBs that have been spectrally analyzed indicates a narrow distribution extending from tens of KeV to a few MeV (Preece et al. 2000). However, there has been great debate on whether the upper and lower cutoff in

the tails of the $E_{p,obs}$ distribution are intrinsic to GRBs or strongly affected by the sensitivity of detectors (e.g. Piran 2005; Lloyd & Petrosian 1999; Higdon & Lingenfelter 1998; Cohen et al. 1997; Piran & Narayan 1996).

The discovery of X-Ray Flashes (XRFs) with familiar temporal structure to GRBs but with typically lower peak energies (Kippen et al. 2004; Kippen et al. 2002; Heise et al., 2001) indicates that the lower cutoff observed in the distribution of $E_{p,obs}$ is not real and is due to either the low sensitivity of BATSE LAD detectors in this energy range or sample incompleteness caused by the limitations of the spectral analysis. Similarly, the reality of the observed cutoff in the upper tail of $E_{p,obs}$ distribution has also been questioned by the references above. However, a study of the Solar Maximum Mission (SMM) data (Harris & Share, 1998) suggests that there is a deficiency - by at least a factor of 5 - of GRBs with $E_{p,obs}$ above 3 MeV relative to GRBs peaking at ~ 0.5 MeV. But these data are consistent with a population of peak energy that extends up to 2 MeV.

There have also been reports on the existence of correlations between the rest frame spectral peak energies ($E_{p,int}$) of GRBs and their 1-second isotropic peak luminos-

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ity (L_{iso}), as well as reports on correlations between $E_{p,int}$ and isotropic-equivalent radiated energy (E_{iso}) (Schaefer 2007; Ghirlanda et al. 2007; Amati 2006; Amati et al. 2002). However, one major problem with these relations is sample incompleteness. In particular, the Amati & the proposed $L_{iso} - E_{p,int}$ relations have been constructed from less than 100 bright GRBs. Several studies have questioned the validity of these relations, arguing that some GRBs do not obey them (e.g. Shahmoradi & Nemiroff 2009a; Butler et al. 2009a; Butler et al. 2007; Nakar & Piran 2005; Band & Preece 2005), and that it is plausible that some part of these relations are due to complex selection effects in the detection and measurement processes.

So far, the spectra of only 350 out of 2704 GRBs detected by BATSE have been analyzed in detail using a variety of spectral models (e.g. Kaneko et al. 2006, hereafter K06). Although these 350 GRBs need to be especially bright to allow for accurate spectral analyses, inclusion rules, such as requiring a minimum flux or Signal-to-Noise Ratio (S/N), may carry significant limitations and biases (Shahmoradi and Nemiroff 2009a).

In this paper we propose a novel method that is designed to increase the number of usable GRBs in spectral correlations and population studies while reducing limitations and biases: using a hardness ratio to estimate $E_{p,obs}$. We define a new hardness ratio HR_H that is the sum of the fluences in channel 4 and 3 of BATSE LAD detectors, divided by the sum of the fluences in channel 2 and 1. Equivalently, this corresponds to dividing the energy fluence received by BATSE triggered LADs in the energy range (300 - 2000 KeV) by the energy fluence received in the energy range (20 - 300 KeV). We will show here this and other hardness ratios are in fact good estimators of $E_{p,obs}$.

The plan of the paper is as follows: §2 describes the $HR_H - E_{p,obs}$ relation while briefly discussing the significant differences that exist between the reported values of $E_{p,obs}$ of BATSE GRBs due to the use of different spectral models to fit the data. §3 is spent on the derivation of the prediction intervals for the relation. The estimation and prediction power of the relation will also be discussed there. Some examples on the applications of the relation, in particular, the $E_{p,obs}$ distribution of BATSE GRBs will be discussed and the results will be summarized in §4.

2 $E_{p,obs}$ ESTIMATION FOR BATSE BURSTS

The fluences in different channels are taken from the current BATSE catalog available at the HEASARC archives¹. Immediately, a strong correlation was found between HR_H and

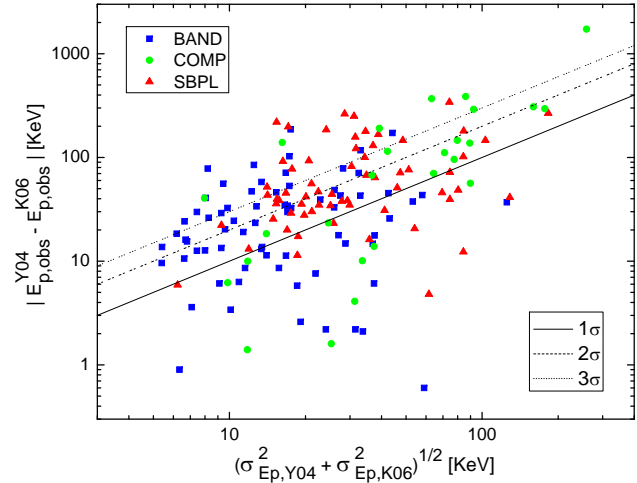


Figure 1. Differences in $E_{p,obs}$ vs. total 1σ errors in $E_{p,obs}$ for Y04 and K06 GRBs. For any point that lies above the solid line/dashed line/dotted line, the two reported values of $E_{p,obs}$ for that GRB are inconsistent at more than $1\sigma/2\sigma/3\sigma$ level. Therefore, 69% (26%) of all bursts have an $E_{p,obs}$ reported by K06 that is inconsistent at the $> 1\sigma$ ($> 3\sigma$) level with the $E_{p,obs}$ reported by Y04.

$E_{p,obs}$ for 249 BATSE bright bursts that are common between the current BATSE catalog and 350 BATSE bursts analyzed by K06 (Kendall's $\tau_K = 0.68, 16\sigma$).

In fact, for many GRB detectors such as BATSE, HR_H might even be a preferred measure of GRB spectral peakedness in νF_ν than $E_{p,obs}$ for several reasons. First, HR_H is relatively immune to details of GRB spectral analyses, and therefore, quite possibly, hiding fewer unexpected thresholds and hidden selection effects. Additionally, HR_H is easier to measure for faint GRBs, allowing HR_H to be computed with little statistical error for many more GRBs than 350 – in fact for most BATSE GRBs.

We use HR_H rather than any other definition of hardness ratio to estimate $E_{p,obs}$ because of its relatively low statistical variance, the boundary energy between high and low energies (100 KeV), and its strong linear correlation with $E_{p,obs}$ (Pearson's correlation coefficients: 0.89, 0.88 & 0.88 at $> 13\sigma$, $> 10\sigma$ & $> 14\sigma$ significances for the three Band, COMP(CPL), and SBPL spectral models respectively). The existence of such a strong positive correlation might not be very surprising since both parameters $E_{p,obs}$ & HR_H are measures of the spectral hardness of a GRB. An unexpected but useful perk is that the relation is nearly linear over a wide range of BATSE $E_{p,obs}$ energies.

2.1 Systematic Errors in $E_{p,obs}$ Estimates

Although a decade has passed since BATSE ended its mission, less than one quarter of the total number of GRBs detected by BATSE have been spectrally analyzed to date.

¹ <http://gammaray.msfc.nasa.gov/batse/grb/catalog/current/>

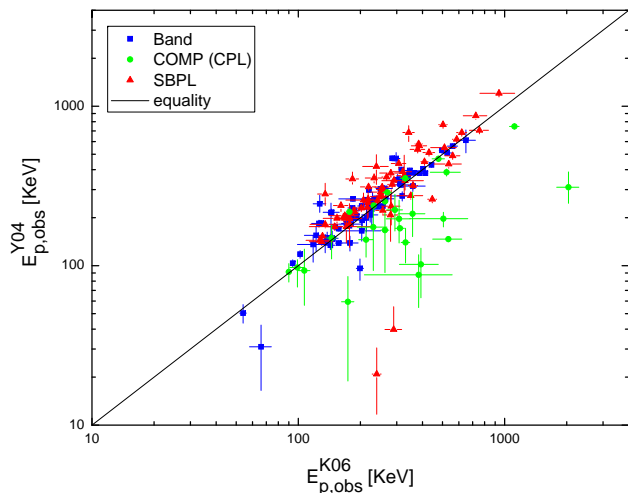


Figure 2. Direct comparison of $E_{p,obs}$ estimates given by K06 and Y04 for the same sample of BATSE LGRBs: The sample for which K06 find Band as the best fit model (blue squares), the sample for which K06 find COMP as the best fit model (green circles), and the sample for which K06 find SBPL as the best fit model (red triangles). Note that Y04 use Band model for all GRBs. The solid line in the graph delineates where the two $E_{p,obs}$ estimates would be equal. Comparison of the two $E_{p,obs}$ estimates reveals that the presumed spectral model can have a significant effect on the derived spectral parameters.

Examples of such works include Ghirlanda et al. (2009), hereafter G09; K06; Yonetoku et al. (2004), hereafter Y04; Preece et al. (2000). In an impressive work, K06 have analyzed 350 brightest BATSE GRBs, and fit the spectra of the bursts with a variety of spectral models. BATSE GRBs spectra are most commonly fit with an empirically determined double power law connected by a smoothly fit transition region (Band et al. 1993, commonly referred to as the “Band model”). When plotted as νF_ν versus ν , a peak energy is evident, usually referred to as $E_{p,obs}$. Other spectral models exist that exhibit a similar peak. It has been noted, however, that spectral parameters including $E_{p,obs}$ are highly dependent on which spectral model is being fit, leading to non-negligible differences in the various published values of the bursts properties by independent authors (e.g. Collazzi & Schaefer 2008; K06; Preece et al. 2002; Ghirlanda et al. 2002).

In order to show the biases produced by using different spectral models, we compared the peak energies of 161 BATSE GRBs obtained by Y04 using the Band model to the peak energies of the same bursts reported by K06 using three different models: Band, Comptonized Model (COMP, also known as CPL; Pendleton et al. 1997; Mazets et al. 1981), and Smoothly-Broken Power Law (SBPL) (Preece et al. 2000; Ryde 1998). The variations are seen graphically in Figure 1, which shows the difference in $E_{p,obs}$ values reported by Y04 and K06 vs. the square-root of the sum of the squares of their 1σ error bars for each individual burst. We

divided the whole sample into three subsamples delineated by Band, CPL and SBPL in K06. For any point that lies above the solid line in Figure 1, the two reported values of $E_{p,obs}$ of the GRB are inconsistent at more than their given 1σ uncertainties in Y04 and K06.

Surprisingly, 63% of the Y04 $E_{p,obs}$ are inconsistent with K06 $E_{p,obs}$ for the GRBs best described by the Band model in K06 at $> 1\sigma$ level. This ratio is even higher for the case of GRBs best described by COMP model (65%) and by SBPL model (78%). Overall, we find that 69% (26%) of all bursts have reported $E_{p,obs}$ by K06 and Y04 that are inconsistent with each other at $> 1\sigma$ ($> 3\sigma$) level. Moreover, the $E_{p,obs}$ differences do not show a Gaussian distribution about zero, particularly those described by CPL, and to a lesser extent those described by SBPL. This implies the existence of a systematic bias in $E_{p,obs}$ of Y04 due to the use of the Band model as an ‘a priori’ best fit to all LGRBs.

Inspection of Figure 2 indicates that Y04 underestimates $E_{p,obs}$, relative to K06, for those LGRBs that are best fit by CPL, while Y04 slightly overestimates $E_{p,obs}$ for GRBs best fit by SBPL. For one burst in the CPL subsample (BATSE trigger 6539) there is an extremely large difference between the two peak energies ($E_{p,K06} = 2039 \pm 251$, $E_{p,Y04} = 310.4^{64.2}_{76.9}$). Excluding this burst, the average difference of the peak energies for COMP subsample is 109 KeV. Overall, the similarity of Y04 and K06 $E_{p,obs}$ estimates can be rejected at $> 46\sigma$, $> 35\sigma$ & $> 74\sigma$ for the three Band, COMP & SBPL spectral models respectively, according to χ^2 test. These discrepancies indicate that systematic errors and uncertainties due to model biases are significant. In addition, K06 find that very frequently, some time-resolved spectra cannot be adequately fit by the Band model.

2.2 $HR_H - E_{p,obs}$ Correlation

As shown in the previous section, the use of a specific spectral model as an ‘a priori’ best fit can result in a significant underestimation or overestimation of $E_{p,obs}$ of GRBs. In order to nullify the possible effects of the spectral model, several authors attempted to simultaneously fit the spectra of GRBs with different models and choose the one with the least χ^2 value as the best fit. The most comprehensive analysis of this type for BATSE GRBs has been done by K06 who consider five different spectral models in their analyses and spectral fits. Although other authors (e.g. G09; Nava et al. 2008; Y04; Band & Preece 2005) have extended the number of GRBs with measured $E_{p,obs}$, for the reasons discussed above, we rely only on the sample of GRBs with measured $E_{p,obs}$ reported by K06 to find the best linear fit for the $HR_H - E_{p,obs}$ relation. K06 provide the most precise $E_{p,obs}$ measurement for the bright BATSE GRBs to date.

Figure 3, shows the $HR_H - E_{p,obs}$ relation for 249 bursts from K06 with measured $E_{p,obs}$ that also have reported fluences in the current BATSE catalog. In a standard “Ordinary-Least-Squares” fit, here abbreviated as OLS(Y|X), it is assumed that there is one *dependent* and

one *independent* variable. In the present case, however, there is no priority in assigning either of $E_{p,obs}$ or HR_H as the dependent or independent variables. For such occasions, alternative regression methods have been discussed by several authors (e.g. Babu & Feigelson 1996; Akritas & Bershadi 1996; Feigelson & Babu 1992; Isobe et al. 1990). Following these references, we rely only on the ordinary least squares, OLS(Y|X) & OLS(X|Y), and the bisector of these two lines (Isobe et al. 1990). Nevertheless, we also provide fits to the sample using other regression methods, including robust regressions that are powerful tools for outlier diagnostics. As will be seen in the later sections, the simulation of the HR_H – $E_{p,obs}$ relation indicates that *structural* regression models should be used for the calibration of the relation, since the systematic scatter in the data dominates random measurement noise. Therefore with no weighting for the error bars we find,

$$\text{Log} \left(\frac{E_{p,obs}}{300[\text{KeV}]} \right) = 0.10 + 0.63 \text{Log} \left(\frac{HR_H}{10} \right), \quad (1)$$

for OLS(Y|X), with intercept and slope uncertainties of $\sigma_a = 0.02$ and $\sigma_b = 0.05$ respectively, and,

$$\text{Log} \left(\frac{E_{p,obs}}{300[\text{KeV}]} \right) = 0.15 + 0.87 \text{Log} \left(\frac{HR_H}{10} \right), \quad (2)$$

for OLS(X|Y), with intercept and slope uncertainties of $\sigma_a = 0.02$ and $\sigma_b = 0.002$ respectively, and,

$$\text{Log} \left(\frac{E_{p,obs}}{300[\text{KeV}]} \right) = 0.12 + 0.75 \text{Log} \left(\frac{HR_H}{10} \right), \quad (3)$$

for the bisector line, with intercept and slope uncertainties of $\sigma_a = 0.01$ and $\sigma_b = 0.04$ respectively.

The uncertainties in the slopes and the intercepts are calculated using the formulae given in Table 1 of Isobe et al. (1990). The formulae are obtained via the *delta method* which is based on the central limit theorem and therefore applies only to large samples ($N \gtrsim 30$). Here, there are $N = 249$ GRBs in the calibration sample. The uncertainties derived above are also in excellent agreement with the uncertainties we obtained via bootstrapping (Davison & Hinkley 1997) which is a superior method when Gauss-Markov assumptions in linear modeling do not hold (e.g. Plackett 1950). The sample shows approximately the same dispersion around the three best linear fits (0.11 dex).

The common lack-of-fit F-test that is used together with linear regression in order to test for possible nonlinearities in the data (e.g. Neter et al. 1996), requires the existence of replicates in the observations (i.e. observations with the same explanatory variable). Since the HR_H – $E_{p,obs}$ relation has no clear independent variable, we also fit the data with a second-order polynomial, and test the coefficient of the second-order term against the null hypothesis of being zero using t-statistic. There is only a very weak 0.7σ evidence ($p = 0.48$) to reject the null hypothesis and therefore, the linearity of the relation, cannot be rejected *within the range of* the calibration sample. Following Feigelson & Babu (1992), the 1σ confidence intervals for the mean responses of the

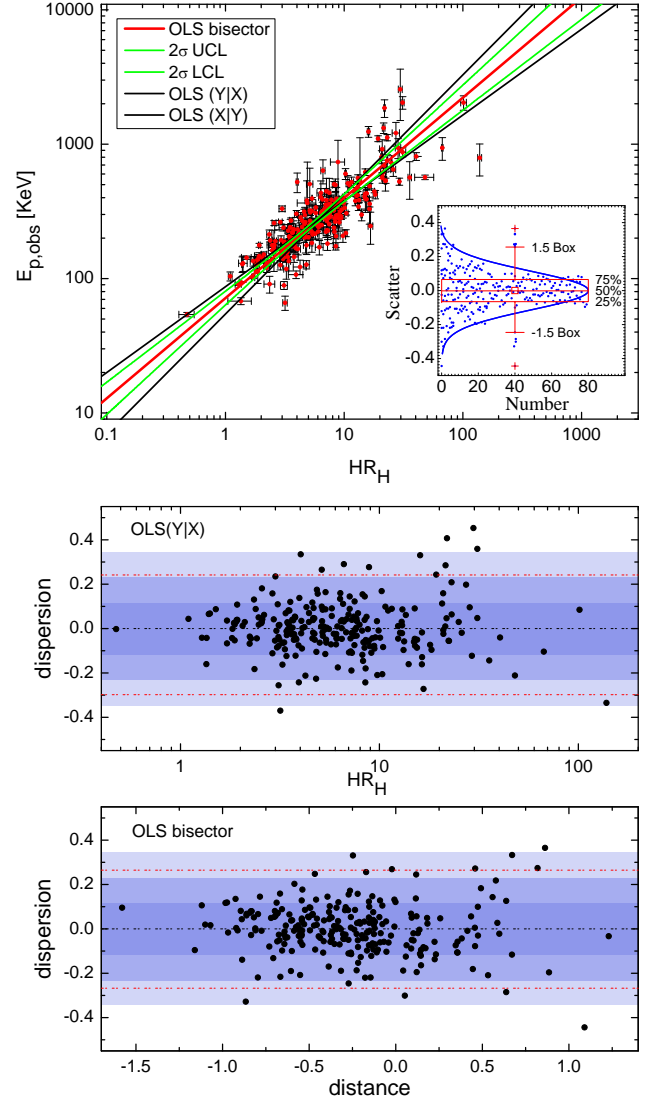


Figure 3. **Top:** Plot of $E_{p,obs}$ versus HR_H as defined in §1. $E_{p,obs}$ of 249 bright BATSE bursts are taken from K06. The two green solid lines represent 2σ upper and lower confidence intervals for the mean response of OLS-bisector. The inset graph is the box-&-whisker plot (Tukey 1977; Tukey 1970) and histogram of the residuals of OLS-bisector. The distribution of the residuals (blue dots), while being symmetric about zero, is slightly heavy-tailed compared to Gaussian distribution shown as the solid blue curve. **Middle:** Plot of OLS(Y|X) residuals versus the explanatory variable HR_H . **Bottom:** Plot of OLS-bisector residuals versus their distances from the barycenter of the sample projected on the bisector line. The three different background colors in the *middle* and the *bottom* plots are 1σ , 2σ & 3σ regions of the residuals from dark to light blue respectively. The red-dashed lines represent the interquartile ranges, beyond which points are generally considered as outliers. The only $> 4\sigma$ outlier of OLS-bisector fit is GRB trigger 2679 (Figures 4, 5, 6).

three OLS lines given a hardness ratio x_0 can also be derived as,

$$\begin{aligned} \hat{\sigma}_{1,2,3}^2 &= \frac{1}{N^2} \sum_{i=1}^N \{y_i - \bar{y} - \hat{\beta}_{1,2,3}(x_i - \bar{x}) \\ &+ \hat{a}_j(x_i - \bar{x})[y_i - \bar{y} - \hat{\beta}_1(x_i - \bar{x})] \\ &+ \hat{b}_j(y_i - \bar{y})[y_i - \bar{y} - \hat{\beta}_2(x_i - \bar{x})]\}^2. \end{aligned} \quad (4)$$

The indices 1,2,3 of the slope of the regression line, $\hat{\beta}$, correspond to OLS(Y|X), OLS(X|Y) & OLS-bisector, respectively, and x_i & y_i are $\log(HR_H)$ & $\log(E_{p,obs})$ of $N = 249$ GRBs in the calibration sample given in Table 3. Also \bar{x} & \bar{y} represent respectively the sample means of the regressor and the regressand in the calibration sample. The rest of the parameters are as follows,

$$\hat{a}_1 = \hat{\psi}, \quad ; \quad \hat{b}_1 = 0. \quad (5)$$

$$\hat{a}_2 = 0, \quad ; \quad \hat{b}_2 = \hat{\omega}. \quad (6)$$

$$\hat{a}_3 = \hat{\psi}\hat{\beta}_3[(1 + \hat{\beta}_2^2)/(1 + \hat{\beta}_1^2)]^{1/2}(\hat{\beta}_1 + \hat{\beta}_2)^{-1}, \quad (7)$$

$$\hat{b}_3 = \hat{\omega}\hat{\beta}_3[(1 + \hat{\beta}_1^2)/(1 + \hat{\beta}_2^2)]^{1/2}(\hat{\beta}_1 + \hat{\beta}_2)^{-1}.$$

where,

$$\hat{\psi} = \frac{N(x_0 - \bar{x})}{\sum_{i=1}^N (x_i - \bar{x})^2}, \quad ; \quad \hat{\omega} = \frac{N(x_0 - \bar{x})\hat{\beta}_2}{\sum_{i=1}^N (y_i - \bar{y})^2}. \quad (8)$$

The 2σ upper & lower confidence limits on the mean response for OLS-bisector line are depicted as green solid lines in Figure 3.

To obtain the slope variances and the confidence intervals we did not rely on the standard formulae (e.g. Bevington & Robinson 2003) that are derived based on the restrictive Gauss-Markov assumptions, including the presumption of the homoscedasticity of residuals (i.e. uniform dispersion of data along the regression line) which should hold in order for OLS to be the Best Linear Unbiased Estimator (BLUE). In the presence of heteroscedasticity (i.e. nonuniform dispersion of data along the regression line), although OLS still remains unbiased, it may not be an efficient estimator. This means that although the slope and intercept of OLS line remain unbiased, the errors in the slope and intercept could be significantly underestimated, which in turn could result in the overestimation of the t -scores of the estimated coefficients and increase the chance of making type I error in hypothesis testings of the following sections. In addition, the confidence intervals on the mean response might not be reliable.

The classic assumption of homoscedasticity appears not to hold in $HR_H - E_{p,obs}$ relation. In order to identify heteroscedasticity in the residuals of OLS-bisector fit, we employ three classic heteroscedasticity tests: White test (White 1980), Glejser test (Glejser 1969) and the modified Levene's test (Brown & Forsythe 1974; Levene 1960) which is more robust against departures of the residuals from normality as compared to Glejser test. According to these tests,

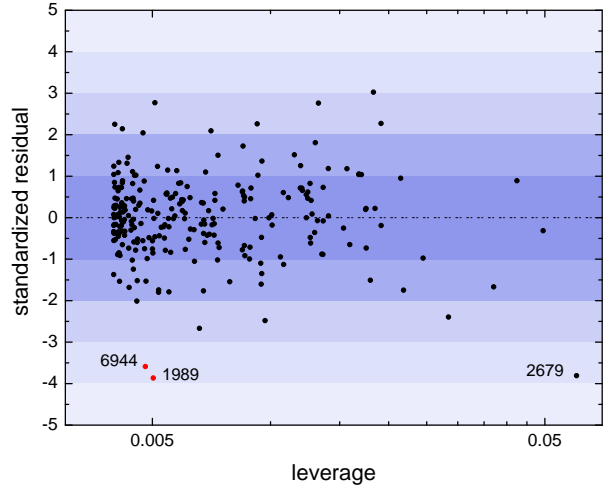


Figure 4. Plot of the standard residuals of OLS-bisector fit to the calibration sample versus the their corresponding hat values (leverages) depicting the effects of individual data points on OLS-bisector line. The five differently colored regions represent the 1σ , 2σ , 3σ , 4σ & 5σ of the standardized residuals from dark to light blue respectively. Points with high leverages and standard residuals are considered to be *influential* observations that have significant effects on the slope and intercept of the bisector line. The two red points represent GRB triggers 1989 & 6944 that were excluded from the calibration sample due to the reasons described in §2 (also Figure 6). Although far outliers to the bisector line, their exclusion has a very weak effect on the slope & intercept due to their closeness to the barycenter of the data. In contrast, GRB trigger 2679, although a high-leverage outlier to the bisector fit and influential point, was not excluded since it cannot be labeled as an sporadic outlier (§2 & Figures 5 & 6).

the null hypothesis of homoscedasticity is rejected at 6σ ($p = 0.0024$), 3σ ($p = 0.0034$) & 2.4σ ($p = 0.019$) respectively. It should be noted that the residuals of OLS(Y|X) also show a significant evidence of heteroscedasticity at about the same significance levels as for the OLS-bisector fit.

Although the hypothesis of homoscedasticity is rejected, the general pattern of the heteroscedasticity is not clear in the residuals of the OLS fits to the calibration sample (Figure 3). It was therefore useful to simulate the relation beyond the ranges of $E_{p,obs}$ & HR_H of the calibration sample GRBs to find the pattern. As shown in Figure 3 (Middle & Bottom), there is also evidence for the existence of $> 3\sigma$ outliers, though they constitute a very small fraction ($< 1\%$) of the calibration sample.

Although OLS-bisector's residuals resemble a Gaussian distribution (Figure 3), careful analysis indicates that it is heavy-tailed compared to a Normal distribution. First, the Kolmogorov-Smirnov (K-S) (Kolmogorov 1941; Smirnov 1948) test of normality for OLS-bisector residuals does not indicate a significant deviation from normality ($p = 0.28$). However, according to Anderson-Darling test (Anderson & Darling 1952), a test that is more sensitive to the tails of the

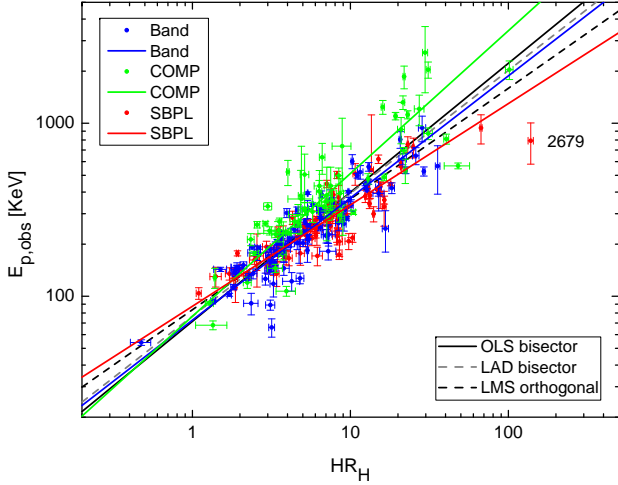


Figure 5. Plot of $E_{p,obs}$ versus HR_H for the same sample of GRBs as in Figure 3. The three colors correspond to the three different spectral models that K06 have used to analyze the spectra of the bursts. The colorful lines (blue, green & red) are OLS-bisector fits to corresponding samples. The slopes of the three lines and their corresponding 1σ uncertainties are $\hat{\beta}_{1,Band} = 0.71$, $\hat{\sigma} = 0.04$, $\hat{\beta}_{1,COMP} = 0.83$, $\hat{\sigma} = 0.06$, $\hat{\beta}_{1,SBPL} = 0.59$, $\hat{\sigma} = 0.04$. As implied by the variances, the slopes of the three lines are statistically, significantly different from each other. This causes the residuals of OLS-bisector fit to the entire sample (solid-black line) to be heteroscedastic as mentioned in §2. The two gray & black dashed lines, represent respectively L_1 regression line, also known as Least Absolute Deviations, and the high-breakdown LMS regression which uses the median of the squared residuals as the breakdown value. L_1 regression, although less sensitive to outliers compared to OLS, does not show any significant difference with OLS-bisector fit. However, since more than half of the sample are fit by either the Band or SBPL model, LMS line follows the trend in the sample of these two models and treats the COMP model bursts as outliers. This causes the slope of LMS regression (black dashed line) to be significantly different from OLS-bisector's, but similar to the bisector fits for the GRB samples of the Band & SBPL models. The labeled data point is GRB trigger 2679. Although a high-leverage $> 4\sigma$ outlier (Figure 4) to OLS-bisector (black solid) line and an *influential* observation in the regression, it was not excluded from the calibration sample due to the reasons discussed in §2, also Figure 6.

distribution than K-S test, the null hypothesis of normality is rejected at 1% significance level.

Symmetry & normality of the residual distribution is of particular importance for works that study the population distribution of $E_{p,obs}$ (e.g. Shahmoradi & Nemiroff 2009a). If the symmetry and normality criteria do not hold, HR_H might be a biased indicator of the value of $E_{p,obs}$, particularly in the large data sample outside of the small calibration data set. It is therefore useful to examine the validity of the symmetry and normality criteria beyond the range of the calibration sample by simulation.

Figure 5 shows the calibration sample of Figure 3, but

fit to three different spectral models used by K06. Each model is shown by a different color. As seen, GRBs that are fit by COMP (CPL) model (green dots) are on average above the OLS-bisector fit for the entire sample (black solid line). Conversely, the two other groups of GRBs fit by the Band and SBPL models show trends that are different from COMP model (green solid) line, but similar to each other. This means that for a given hardness ratio HR_H reported in the BATSE catalog, there can be different $E_{p,obs}$ associated with the burst, according to what model has been used for the spectral analysis.

In addition, there is an intrinsic scatter in each of the three samples which is not due to measurement error. The ‘unexplained variances’ of $E_{p,obs}$ might be attributed to the fact that HR_H is not uniquely determined by $E_{p,obs}$ and other free parameters of the 3 spectral models, such as the high and low energy photon indices, create the observed dispersions in data. Another reason for the scatter in the data could be the fact that the two GRB parameters, HR_H & $E_{p,obs}$ come from different sources, i.e. BATSE catalog & K06, who consider different time & energy interval and background fits in their spectral analyses of the bursts (e.g. K06: Table 1).

In order to show this effect more clearly, we also calculate the hardness ratios for the calibration sample using the spectral parameters given by K06. The new hardness ratio HR_S is defined in the same way as HR_H : The fluence in 100-2000 KeV energy range divided by the fluence in 20-100 KeV energy range, corresponding to the ratio of the sum of the fluences in channels 4 & 3 of BATSE LADs to the sum of the fluences in channels 2 & 1.

Contrary to our initial guess, there is a systematic difference between these two hardness ratio estimates which tends to correlate positively with both hardness ratios HR_H & HR_S . HR_H from the BATSE catalog appears to be, on average, greater than HR_S . The reason might be sought in the way the Detector Response Matrices (DRMs) have been considered by K06 and BATSE team in their analyses (Preece, private communication). Nevertheless, the primary reasons for the biases in HR_H & HR_S will be investigated in a separate work (Shahmoradi & Nemiroff 2009c). Figure 6 shows graphically the systematic differences between these two hardness ratio estimates.

For the three spectral models we find the below relations for HR_H as a function of HR_S :

$$\text{Log}(HR_H) = 0.09 + 1.12\text{Log}(HR_S), \quad (9)$$

for the Band model GRBs, and,

$$\text{Log}(HR_H) = 0.22 + 1.06\text{Log}(HR_S), \quad (10)$$

for the COMP model GRBs, and,

$$\text{Log}(HR_H) = 0.06 + 1.26\text{Log}(HR_S), \quad (11)$$

for the SBPL model GRBs.

Heteroscedastic residuals and the presence of outliers are strong motivations to consider also robust regression

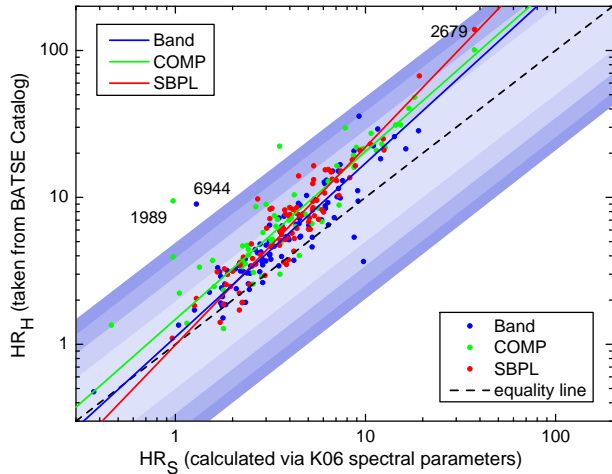


Figure 6. Plot of HR_H taken from BATSE catalog, versus HR_S calculated via the spectral parameters given by K06 for the calibration sample, in the same energy range as for HR_H . As seen the hardness ratios calculated via BATSE catalog data are on average always greater than their counterparts calculated using the spectral parameters. In addition, the deviation from the equality line increases as the two hardness ratios increase. The reason for such discrepancy should be probably sought in the way the DRMs have been included in the spectral analysis (§2). The colored regions from dark to light represent the region of $HR_S/5 < HR_H < 5HR_S$, $HR_S/4 < HR_H < 4HR_S$, $HR_S/3 < HR_H < 3HR_S$ & $HR_S/2 < HR_H < 2HR_S$ respectively. The three blue, green & red colored points and their OLS-bisector fits (the blue, green & red solid lines) correspond to the three Band, COMP & SBPL spectral models used by K06 to analyze the bursts. GRB trigger 1989 & 6944 are the two low-leverage outliers of $HR_H-E_{p,obs}$ relation (Figure 4) that were excluded from the calibration as their reported spectral parameters in K06 & BATSE catalog are in stark contrast to each other. The high-leverage $> 4\sigma$ outlier to OLS-bisector line (Figure 3), GRB trigger 2679, however, was not excluded from the calibration sample, since it lies along the general trend (the red OLS-bisector line) visible in the plot, though it is an *influential* point in the regression and its HR_H is 5 times larger than its HR_S .

methods such as L_1 (Karst 1958) – also known as the Least Absolute Deviation (LAD) regression – & high-breakdown regressions (e.g. Rousseeuw 1984) that are resistant to high-leverage outliers. These regression techniques effectively check that the OLS methods are not significantly affected by the presence of hidden outliers. Applying these regression methods to the entire 249 GRBs in the calibration sample, we find a weak evidence for the significance of the difference between slopes of L_1 and OLS regression lines, according to the uncertainties in the slopes. However, the Least Median of Squares (LMS) line (Rousseeuw 1984) which uses the highest breakdown value (50%) shows a significantly different slope compared to OLS-bisector fit to the entire calibration sample (Figures 3 & 5). Recall that the entire sample of 249 GRBs was divided into three groups by K06 – those

GRBs best fit by the Band model, those GRBs best fit by the COMP model, and those GRBs best fit by the SBPL model. Now the slope of the LMS line for all 249 GRBs in the K06 calibration sample appears more similar to the slopes of OLS-bisector lines for the sample of the Band & SBPL spectral models (Figure 5). This is due partly to the fact that there is an intrinsic difference between the slopes of the bisector and orthogonal regression lines. But the main reason for the difference is the high breakdown value of LMS estimator. Since more than half of the calibration sample GRBs are fit by the Band & SBPL models, the LMS line would treat the COMP model GRBs as outliers and therefore, the LMS line follows approximately OLS-bisector lines for the two Band & SBPL GRB samples (blue & red solid lines in Figure 5).

However, we expect that as more BATSE GRBs are added, the slopes of the two OLS and LMS regression lines would converge to each other. The reason is that the rest of BATSE catalog GRBs are generally much fainter than 249 bright GRBs in the calibration sample and therefore of much lower signal-to-noise ratios compared to the K06 sample. In these cases, COMP model appears to be the preferred spectral model due to its simplicity and low number of free parameters compared to the Band & SBPL models, since having an additional free parameter usually results in highly cross-correlated, unconstrained parameter determinations (e.g. K06). This can in turn, balance the number of COMP model GRBs compared to the number of GRBs well fit by the two other spectral models as more spectrally analyzed bursts are added to the sample.

3 PREDICTION INTERVALS FOR $HR_H-E_{p,obs}$ RELATION

Unlike the analytical method used to derive confidence intervals for the mean responses of OLS regression lines in §2.2, the derivation of prediction intervals cannot be achieved without recourse to a detailed and accurate knowledge of the pattern of the heteroscedasticity in $HR_H-E_{p,obs}$ relation, in particular, beyond the range of the calibration sample where the relation might not have a linear behavior. The prediction interval is, by definition, the interval within which the individual values of $E_{p,obs}$ of BATSE GRBs would most likely fall given their hardness ratios. This is in contrast to the definition of the confidence interval *on the mean response* of OLS regression lines derived in §2.2.

To achieve this goal, we run extensive simulations of the relation over a wide range HR_H & $E_{p,obs}$ for the Band, COMP & SBPL spectral models. The simulation algorithm is fairly simple and includes the following steps:

- (i) Simulate a GRB by drawing randomly its spectral parameters from their parent distributions for each of the 3 GRB models. These include $E_{p,obs}$ for the three models and their corresponding high and low-energy photon indices.

(ii) Calculate the hardness ratio HR_S as defined in §2.2. The spectral forms of the 3 GRB models that are required to calculate HR_S , have been given and discussed in detail by K06.

(iii) Map HR_S to HR_H via Eqns. (9),(10) & (11). Here, we have essentially assumed that the bias seen between HR_H and HR_S in §2.2 (Figure 6) remains linear over the entire range of BATSE GRBs hardness ratios. The assumption appears reasonable as we find that HR_H & HR_S of BATSE GRBs other than 249 GRBs considered here also follow the same patterns. These include GRBs analyzed by Nava et al. (2008) – hereafter N08 – & G09.

(iv) Repeat steps (i) to (iii) until the desired accuracy in the prediction intervals is achieved.

Steps (ii)-(iv) in the above algorithm are straightforward. The first step, however, requires the knowledge of the distributions of GRB spectral parameters for the three spectral models. To derive the parent distributions from which the random spectral parameters of the simulated GRB should be drawn, we present in the following subsection, a comprehensive Bayesian multivariate analysis of the observational GRB data, mainly taken from K06, subject to truncations and sample-incompleteness effects that exists in the data sets.

3.1 Multivariate Analysis of GRB Spectral Parameters

3.1.1 Observational Data and Sample Selection

So far, the spectra of 342 BATSE GRBs have been simultaneously fit by a variety of spectral models (K06) – the most important models being Band, COMP, SBPL – to find the best fit model of GRBs. The sample includes the observational data for 118 GRBs best fit by the Band, 70 GRBs best fit by COMP & 137 GRBs best fit by SBPL models. This data set might therefore be used as an accurate proxy to derive the underlying probability density functions (pdf) of GRB spectral parameters. However, for the reason of better statistics, we increase the number of GRBs in the Band sample of K06, by including 32 BATSE GRBs that are well fit by the Band model in G09, also 16 LGRBs fit by the Band model in N08.

Due to low Signal-to-Noise ratio (S/N) of GRBs analyzed by G09 & N08, they consider only two spectral models of the Band and COMP. However, although low S/N GRBs spectra might be well fit by the Band or CPL (COMP), these two might have not been necessarily the best-fit spectral models, had GRBs had high enough S/N to perform a 5-parameter model (e.g. SBPL) fit (K06; Band et al. 1993). Therefore, to ensure accuracy in the selected sample of GRBs from G09 and N08, we compared their derived fluences and hardness ratios to those given in the BATSE catalog and excluded inconsistent bursts. In addition, since

we ignore the uncertainties of the spectral data in the following analyses, we also require that the spectral parameters of GRBs taken from G09 & N08 have 1σ uncertainties that are at least as small as the largest 1σ uncertainties in K06 data.

In the same way, because of the small number of COMP model GRBs in K06 sample, we include 39 BATSE LGRBs from G09 that are well fit by COMP model. Also, 27 SWIFT (Gehrels et al. 2004) GRBs from Cabrera et al. (2007), 36 HETE-II GRBs from Pelangeon et al. (2008) and 22 HETE-II GRBs from Sakamoto et al. (2005) are included. By contrast, due to the significant inconsistencies that exist between the fluences and hardness ratios of G09 SGRB sample and their corresponding values reported in BATSE catalog, none of G09 SGRBs were included in the sample of COMP model GRBs considered here.

Except K06, no one has attempted to fit the spectra of a significant number of GRBs by SBPL model. We therefore rely only on 137 GRBs of K06 to constrain the parameters of this model.

3.1.2 Bayesian Multivariate Analysis of Data

So far, only univariate analyses of the time-integrated spectral parameters of BATSE GRBs have been discussed in the literature (e.g. G09; Sakamoto et al. 2009) ignoring the possible underlying covariances that might exist between the parameters of a GRB model. This might not in general be true. Therefore, to explore the possible interrelationships between the GRB parameters we present below a multivariate analysis of the observational data given above.

According to the Bayes' theorem, the joint posterior probability density function of the set of parameters Θ of each spectral model, given the observed data \mathbf{D} , the assumed statistical model \mathbf{M} and the prior information \mathbf{I} is,

$$P(\Theta|\mathbf{D}, \mathbf{M}, \mathbf{I}) \propto P(\Theta|\mathbf{M}, \mathbf{I}) \times P(\mathbf{D}|\Theta, \mathbf{M}, \mathbf{I}) \quad (12)$$

The parameters to be estimated, are the moments of the assumed statistical model. For example, if the assumed statistical model is multivariate normal distribution, the parameters to be constrained in each of the spectral models would be the means and variances of the low & high-energy indices and the mean and variance of $\ln(E_{p,obs})$ for the Band, COMP & SBPL models, as well as the possible correlations among the spectral parameters. The break scale Λ of SBPL model appears to be a discrete variable in K06 sample. Therefore, the distribution of the break scale is considered separately. Also the normalization factor of all 3 models need not to be considered in the analysis, since the hardness ratio is independent of this parameter. Because of the large number of free parameters involved and the relatively small size of the observational data, comparison of a variety of statistical models to find the best seems impractical. To simplify, we assume that the spectral parameters of different GRB models – denoted by \mathbf{X} – are drawn from a p -dimensional truncated multivariate normal distribution $\mathbf{D} \sim NT_p(\mu, \Sigma)$ where \mathbf{X} is constrained to the region of the p -dimensional

parameter space $\mathbf{R} = \{a_i < \mathbf{X}_i < b_i, i = 1, p\}$. Here, the truncation on the observational data is set by physical constraints on GRB models. For example, the high-energy photon index of the Band and SBPL models should always be < 0 , to avoid energy catastrophe in the GRB prompt emission. Also in COMP model, the photon index α must be > -2 by definition. In addition, SBPL model has $E_{p,obs}$ defined only when its low-energy index $\alpha > -2$ and its high-energy index $\beta < -2$. There is, however, no physical constraint on the possible values that $\ln(E_{p,obs})$ could take and it can range from $-\infty$ to $+\infty$.

The likelihood of data for a GRB model with p free parameters (ignoring the normalization factor) can then be written as,

$$P(\mathbf{D}|\Theta) = (A(\mu, \Sigma))^{-1} (2\pi)^{-Np/2} |\Sigma|^{N/2} \quad (13)$$

$$\times \exp\left(-\sum_{i=1}^N (\mathbf{D}_i - \mu)^T \Sigma^{-1} (\mathbf{D}_i - \mu)/2\right)$$

$$\times \mathbf{I}_R(\mathbf{D})$$

The $p \times 1$ vector μ and the $p \times p$ matrix $\Sigma = \{\sigma_{ij}\}$ represent the mean vector and variance-covariance matrix of the truncated multivariate normal distribution, to be estimated from the data $\mathbf{D} = [\mathbf{D}_1, \dots, \mathbf{D}_N]$, where \mathbf{D}_i is the i th $p \times 1$ observation vector which depending on the spectral model can be written as,

$$\mathbf{D}_{\text{Band},i} = [\ln(E_{p,obs,i}), \alpha_i, \beta_i]^T \quad (14)$$

$$\mathbf{D}_{\text{COMP},i} = [\ln(E_{p,obs,i}), \alpha_i]^T \quad (15)$$

$$\mathbf{D}_{\text{SBPL},i} = [\ln(E_{p,obs,i}), \alpha_i, \beta_i]^T \quad (16)$$

The subscript T stands for ‘Transpose’. Also, the term $\mathbf{I}_R(\mathbf{D})$ in the likelihood function (Eqn. (13)) is an indicator function that sets the likelihood to zero when \mathbf{D} is outside the truncated region \mathbf{R} and it is unity otherwise. Also, the term $(A(\mu, \Sigma))^{-1}$ is a normalization factor which is due to the presence of truncation on data.

As the prior, we adopt the standard choice of the non-informative joint prior density for μ & Σ (Dickey, Lindley & Press 1985; Box & Tiao 1973; Geisser & Cornfield 1963),

$$p(\mu, \Sigma) = p(\mu) \times p(\Sigma) \quad (17)$$

$$\propto 1 \times |\Sigma|^{-(p+1)/2}$$

$$\propto |\Sigma|^{-(p+1)/2}$$

In the absence of truncation, the analytical expressions for the resulting marginal posterior densities have been derived by Geisser & Cornfield (1963). In the presence of truncation, however, there are no analytical expressions for the marginals, due to the term $(A(\mu, \Sigma))^{-1}$ in the likelihood (Eqn. (13)). Therefore, we set up a Markov-Chain Monte Carlo algorithm, widely known as Gibbs sampler (Geman & Geman 1984) to obtain the marginal posterior densities. This is done by sampling iteratively from the conditional distributions of μ (p -dimensional multivariate normal distribution) & Σ (p -dimensional inverse-Wishart distribution), while updating the conditional variables at each iteration by

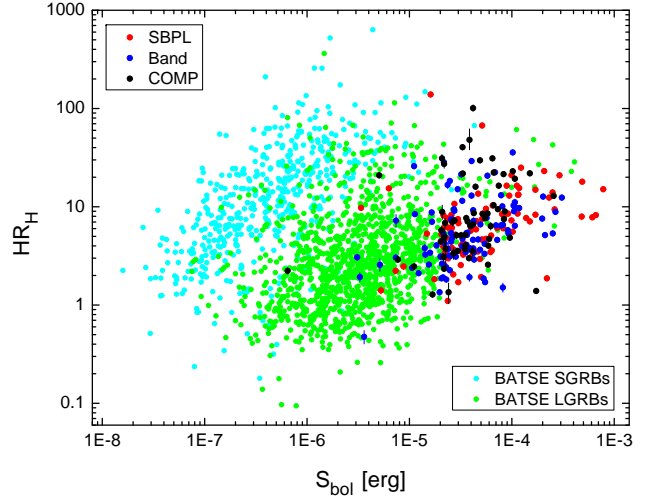


Figure 7. Plot of HR_H vs. the bolometric fluence S_{bol} of the entire BATSE catalog GRBs illustrating the effects of the flux-limit in the K06’s analyzed sample of 350 bright BATSE GRBs. The flux-limit set by K06 was to ensure an accurate derivation of the spectral parameters. Although the derived parameters of GRBs in K06 have little uncertainties, the distribution of the spectral parameters of K06 sample might not represent the underlying distribution of the spectral parameters of the entire BATSE sample of GRBs, due to the effects of data truncation and sample incompleteness imposed by requiring a minimum fluence ($\gtrsim 10^{-5}$ ergs) for the spectral analysis of GRBs. In particular, the variance of $\ln(E_{p,obs})$ distribution of BATSE GRBs, is likely significantly underestimated by the variance of $\ln(E_{p,obs})$ in the sample of K06 GRBs.

the previous values (e.g. Rodriguez-Yam et al. 2004; Griffiths 2004; Geweke 1991). Iteration is then continued until convergence to the target density is assured (Raftery & Lewis 1992). The entire simulation algorithms are written in FORTRAN. The resulting marginal pdfs for the means and variances of the spectral parameters of the three GRB models in addition to the marginal posteriors of the correlation coefficients among the parameters are given in Figure 9.

The above analysis, though mathematically accurate, is based on an erroneous presumption that the spectral parameters of the samples being studied can be regarded as purely *random* variables. Such an assumption is evidently not true. Since different sources (e.g. K06, G09, N08) have been used to collect information on the spectral parameters, the sample is very heterogeneous and suffers from various selection and truncation effects that vary from burst to burst. The simplest of these truncation effects is due to the flux or fluence limits set by these authors (e.g. K06, G09, N08) to ensure a minimum signal-to-noise ratio in their spectral analyses. An example of such data truncation is well illustrated in Figure 7. Therefore, it is likely that the posteriors derived based on these data sets would be biased, an important point that is generally overlooked in the literature (e.g. Sakamoto et al. 2009).

In particular, the distribution of $\ln(E_{p,obs})$ is likely greatly affected in these flux-limited samples, which in turn could affect the distributions of other spectral parameters having nonzero covariances with $\ln(E_{p,obs})$. To identify these potential biases, we also run an extensive set of Monte Carlo simulations for each of the three spectral models to obtain the likelihood functions numerically, subject to data truncation due to sample-incompleteness, contrary to the above Bayesian approach where the likelihood could be written in analytical form (Eqn. (13))

3.1.3 Minimum χ^2 / Minimum KS-Distance Estimates of Parameters Subject to Sample-Incompleteness

Similar to the Bayesian analysis of data in §3.1.2, it is assumed throughout the simulation, that the spectral parameters of three GRB models (Eqns. (14), (15), (16)) are drawn from a truncated multivariate normal distribution. In addition to the truncations due to the physical constraints on the spectral parameters (§3.1.2), we also consider the truncation due to sample-incompleteness and flux-limits imposed on the observational data (Figure 7). Once the effects of sample-incompleteness are understood and modeled, the simulation algorithm is straightforward:

- (i) Generate a random sample of the same size as the observational data from the truncated multivariate normal distribution with random mean vector and covariance matrix, subject to the truncation due to sample-incompleteness.
- (ii) Compare the similarity of the two simulated and observational samples by a proxy.
- (iii) Repeat the above steps to find the most probable set of parameters that would maximize the similarity of the simulated and the observational data.

As seen in Figure 7, the truncation on the observational data due to flux limits, primarily affects the distribution of $\ln(E_{p,obs})$ of BATSE GRBs. In particular, the variance of $\ln(E_{p,obs})$ distribution is likely significantly underestimated in K06 sample of GRBs. Although, our simulations indicate that the flux-limits might also directly affect the distributions of the GRB models' photon indices, we find it to be much weaker compared to the effects of truncation on $\ln(E_{p,obs})$ distribution. Thus, for simplicity we assume that sample-incompleteness only affects $\ln(E_{p,obs})$ directly, and through that, it might affect the probability distribution of any of the rest of spectral parameters that have nonzero covariance with $\ln(E_{p,obs})$.

To model the truncation due to flux-limits on the data, we first estimate the most probable mean and variance of $\ln(E_{p,obs})$ of BATSE GRBs for the 3 spectral models. This can be done, knowing that the hardness ratio distribution of the BATSE GRBs shows an approximately Gaussian behavior with a peak which is very close to the barycenter of

the calibration sample that was used to derive the linear $HR_H - E_{p,obs}$ regression lines in §2.2. Therefore, since $HR_H - E_{p,obs}$ relation is not a biased estimator of $\ln(E_{p,obs})$ close to the barycenter of the data, it can be used to convert the mode of $\ln(HR_H)$ distribution to the mode of $\ln(E_{p,obs})$ normal distribution for each spectral model, which can then be used as an estimate of the mean of $\ln(E_{p,obs})$ of the entire BATSE GRBs for each spectral model *under the assumption of normality*.

To estimate the variance of $\ln(E_{p,obs})$ distribution, we rely on the fact that there is a partial linear correlation between $\ln(E_{p,obs})$ and the logarithm of bolometric 1-second peak flux $\ln(P_{bol})$ of GRBs in the observer frame (e.g. N08; Lloyd & Petrosian 2000). The hard-dim side of this correlation is likely affected by detector thresholds (e.g. Shahmoradi & Nemiroff 2009a). However, the bright-soft region of the correlation is likely real, originated from the physics of prompt emission. Depending on the spectral model considered, the 3σ limit of this relation in the bright-soft region intersects BATSE's trigger threshold ($\sim 0.3 \text{ ph s}^{-1}$ for 1-second trigger in the energy range 50 – 300 KeV) at some point which can be regarded as the 3σ lower limit for $\ln(E_{p,obs})$ of BATSE GRBs beyond which no burst could have been triggered by BATSE Large Area Detectors (LADs) (Shahmoradi & Nemiroff 2009a). These estimates for different spectral models are depicted and compared with the estimates based on the observed samples in Figure 9.

The effect of sample-incompleteness on the observational data can then be modeled by fixing the mean and variance of $\ln(E_{p,obs})$ distribution to the above estimates, and then creating simulated samples that have the same peak energies as in the observational sample. This means that the rest of spectral parameters of each model (i.e. photon indices) are drawn from their conditional distributions on $\ln(E_{p,obs})$. Once the simulated sample is ready, it can be compared to observational data to infer the similarity of the two samples. Generally, the assessment of similarity, requires the use of nonparametric multivariate goodness-of-fit tests. Such tests, although exist, have been rarely discussed and treated in statistics due to difficulties in the interpretation of the test statistic (e.g. Justel et al. 1997; Peacock 1983). In general, one can always use the Pearson's χ^2 goodness-of-fit test (Pearson 1900; Fisher 1924) for any multivariate distribution. However, for the special case considered here, one would need an observed sample consisting of $N \gg 1000$ GRBs to avoid serious instabilities that occur in χ^2 tests due to small sample sizes (Cochran 1954). In addition, since it is already assumed that the data truncation mainly affects the distribution of $\ln(E_{p,obs})$, this parameter is not a random variable in the simulation and it should be regarded as an explanatory variable – determined by the limitations of the analysis – for the rest of the spectral parameters that are considered as the response variables to $\ln(E_{p,obs})$. In this case, the multivariate comparison of the spectral parameters can be reduced to a set of separate univariate goodness-of-fit tests for the marginal distributions of each of the spectral

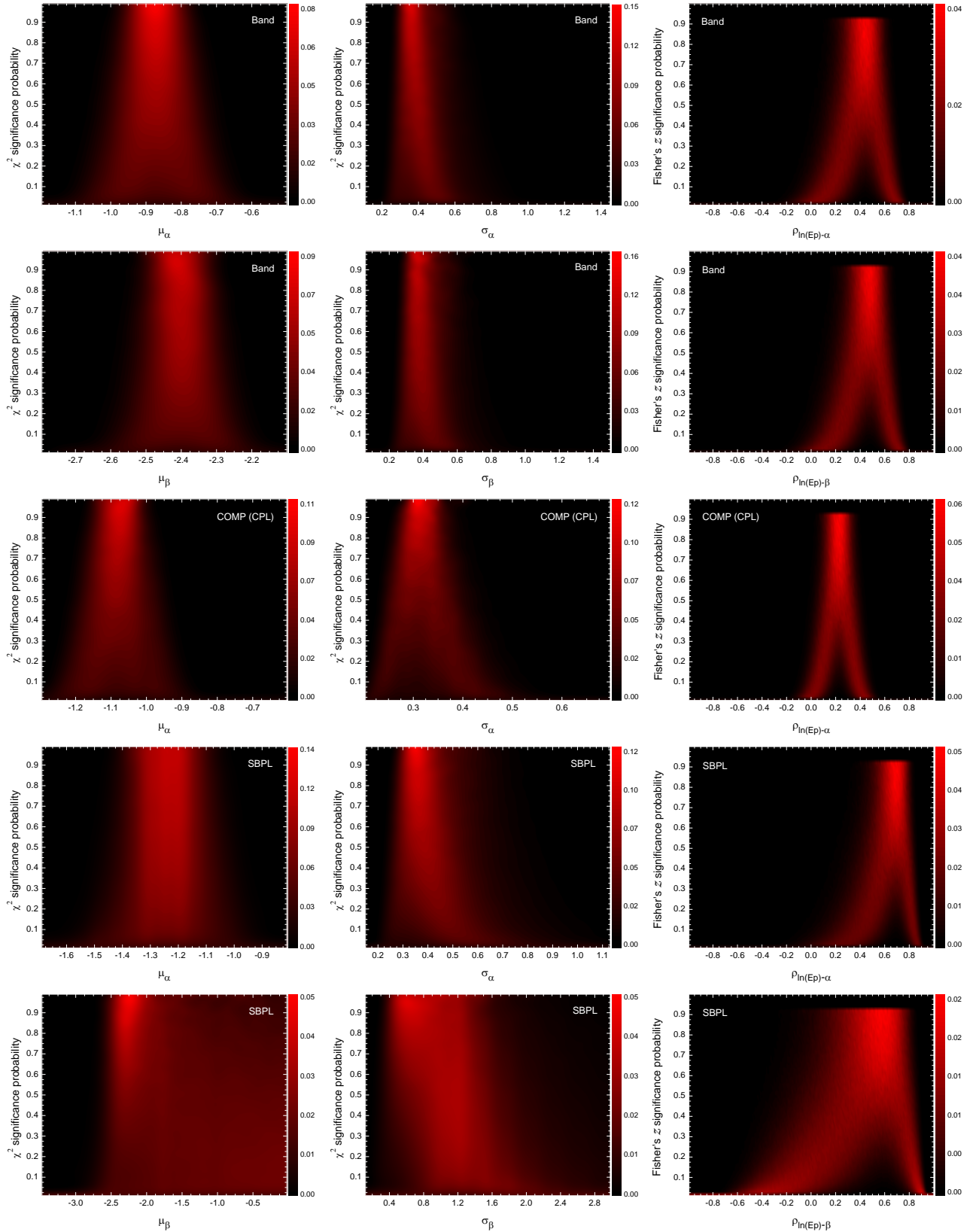


Figure 8. Marginalized likelihood contour plots of the observed data given different parameter values of the truncated multivariate χ^2 distribution for the spectral parameters of the three GRB models. The likelihoods are obtained via simulation including the effects of sample-incompleteness as described in §3.1.3.

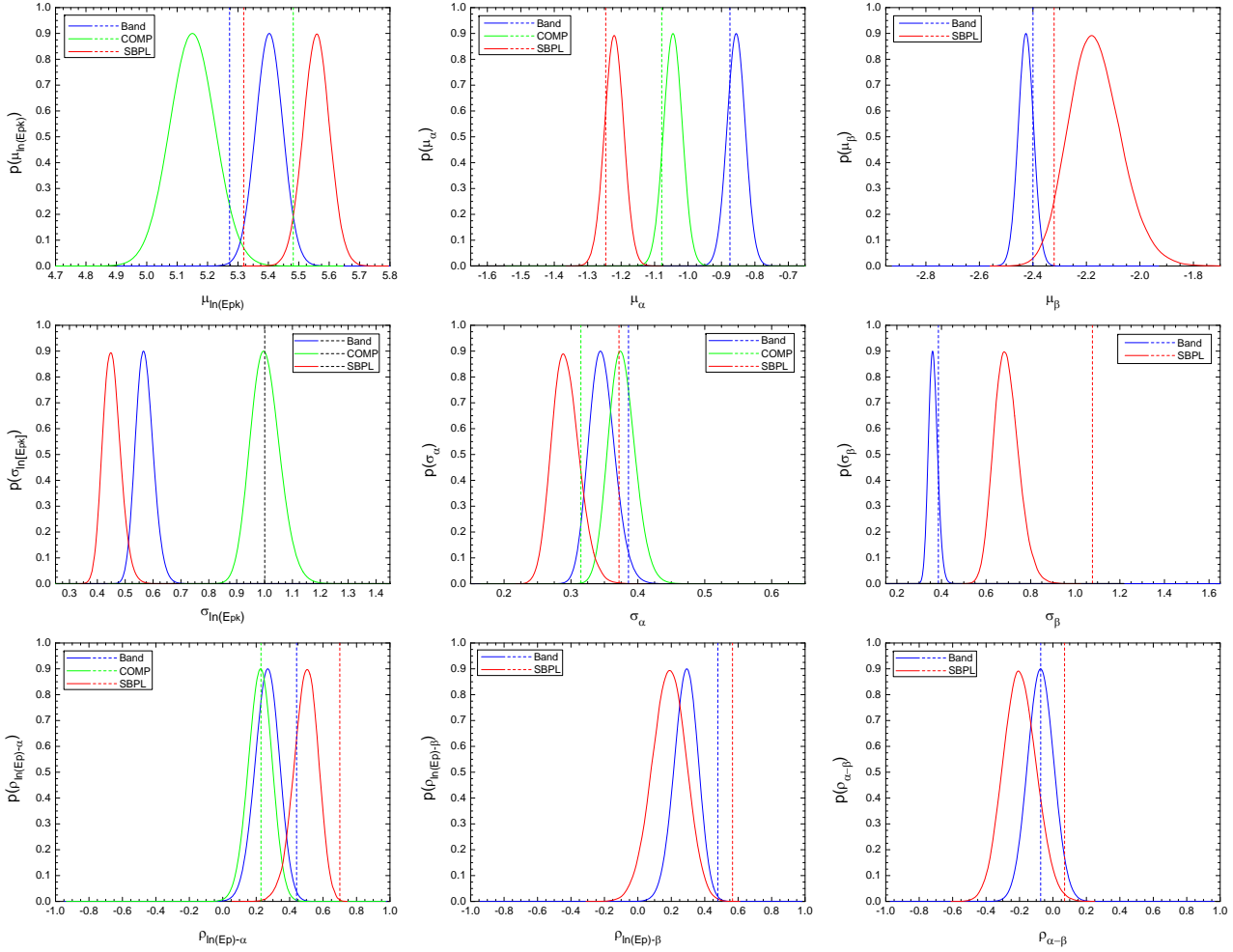


Figure 9. Posterior distributions of the parameters of the truncated multivariate normal distributions considered for the spectral parameters of the 3 GRB models: Band, COMP (CPL) & SBPL. The solid curves for each spectral model parameters are the marginal posterior pdfs derived from the Markov Chain Monte Carlo algorithm described in §3, excluding the possible effects of data-truncation and sample incompleteness, mainly due to the flux-limits set by different authors on the observed-analyzed GRB samples (e.g. K06, G09, N08). The dashed-vertical lines in each graph represent the minimum χ^2 & the minimum KS-distance estimates of the parameters obtained numerically via simulation including the effects of data-truncation and sample-incompleteness on the spectrally-analyzed GRB samples.

parameters. Then the likelihood of the data – given the random mean vector and covariance matrix of the truncated multivariate normal distribution – is assessed by the use of two separate nonparametric χ^2 and KS test statistics (e.g. Weber, Leemis & Kincaid 2006; Györfi et al. 1996; Berkson 1980). To test for the significances of the similarities of the correlation coefficients between the spectral parameters, Fisher’s z statistic (Fisher 1921; Fisher 1915) is used. The simulation then runs for a large number of iterations until the likelihood function reaches its asymptotic form and the most probable set of parameters are found. The resulting marginal likelihoods are shown partly in Figure 8.

It should be noted that although the most probable mean and variance of $\ln(E_{p,obs})$ distribution derived by the

above methods might only be approximations to the true population mean and variance, we find that small deviations ($\lesssim 0.1$ dex) from these estimates result in negligible changes in the derived prediction intervals for $HR_H - E_{p,obs}$ relation.

3.2 Derivation of the Prediction Intervals for $HR_H - E_{p,obs}$ Relation

Now, in order to construct the prediction intervals of $HR_H - E_{p,obs}$ relation, first the spectral parameters of a simulated GRB are randomly drawn from the truncated multivariate normal distribution with its mean vector and covariance matrix fixed to their most probable values derived in §3.1.2 &

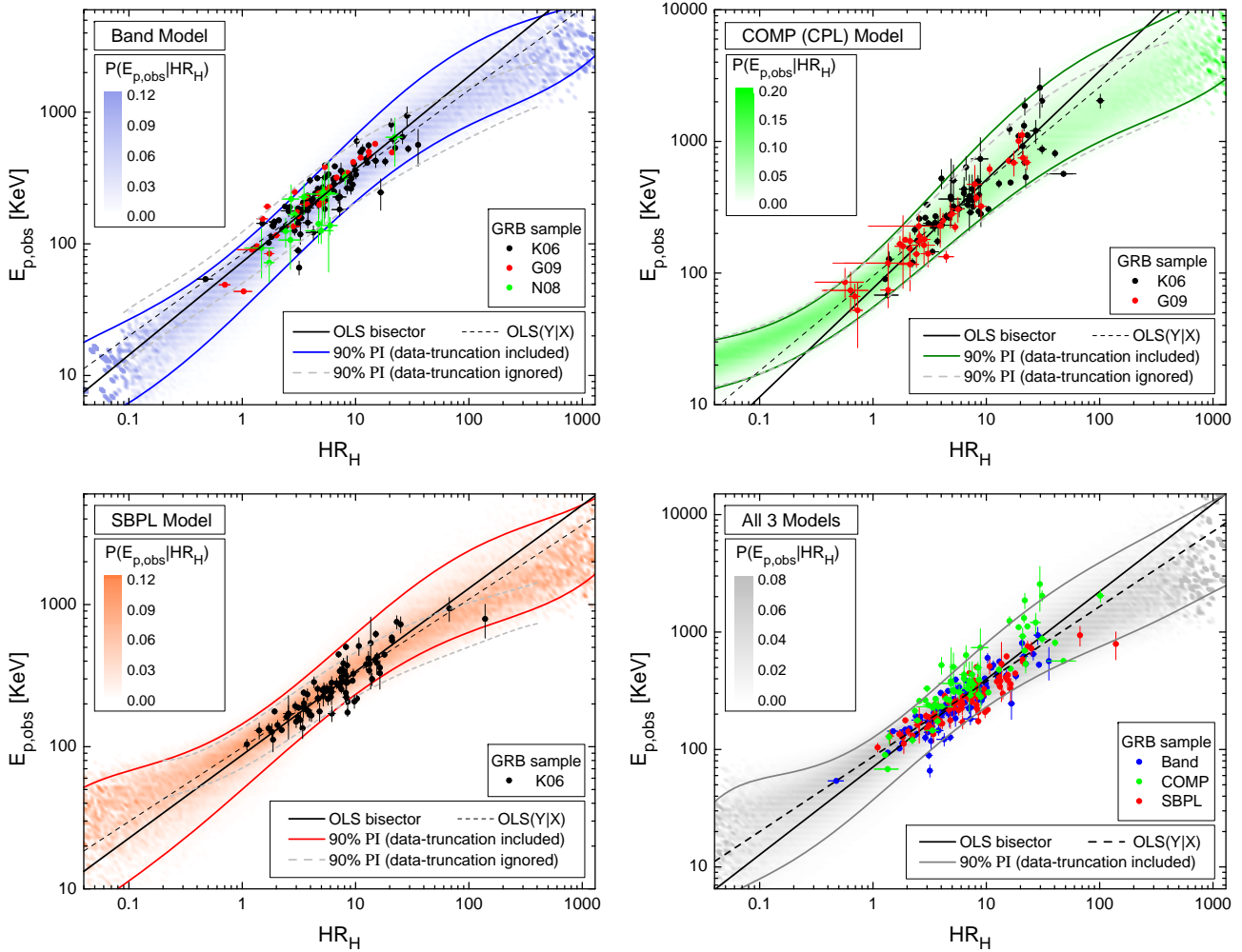


Figure 10. Plot of $E_{p,obs}$ vs. HR_H depicting the 90% Prediction Intervals (PI) for the three spectral models. The solid-curve PI in each graph, are based on the spectral parameters derived from the simulation including the effects of data truncation, mainly due to flux-limits set on the analyzed samples of GRBs by different authors (e.g. K06, N08, G09). In contrast, the gray dashed curves represent the 90% PI for the case that no data-truncation was considered. The colorful dots in each graph represent the analyzed samples of BATSE GRBs by K06, N08 & G09, used to constrain the spectral parameters distributions of the simulation. The background contour plots in the graphs indicate the conditional chances of observing a specific $E_{p,obs}$ given HR_H . The fourth plot (*bottom left*) depicts the 90% prediction intervals derived for the conditional weighted average of $\ln(E_{p,obs})$ on $\ln(HR_H)$ of the three GRB models as given in Eqn. (20). The prediction intervals are obtained by simulating 10,000,000 GRBs for each spectral model.

§3.1.3. The hardness ratio HR_S is then calculated for each simulated GRB based on its randomly given spectral parameters and mapped to HR_H via the linear relations (9),(10) & (11) between HR_S & HR_H in §2.2 (Figure 6). The resulting 90% Prediction Intervals (PI) for each spectral model (Figure 10) are then fit by polynomials of the 5th order. The fits are summarized in table 1.

As seen in §2.2, also Figure 10, the conditional probability of having a particular $\ln(E_{p,obs})$ given a hardness ratio HR_H , $P(\ln(E_{p,obs})|\ln(HR_H))$, at the tails of HR_H – $E_{p,obs}$ relation depends heavily on the spectral model that fits best the GRB spectrum. This means that in order to

know the peak energy of a BATSE GRB given its hardness ratio HR_H from the BATSE catalog, we would also need to know the best fit spectral model for the GRB beforehand, that is,

$$P(E_{p,obs}|HR_H) \propto \sum_{\text{Models}} P(\text{Model}) \times P(E_{p,obs}|\text{Model}, HR_H) \quad (18)$$

where the probability of having a specific spectral model as the best fit, depends on the signal-to-noise ratio (S/N) of the GRB lightcurve and its hardness HR_H (K06; Band et

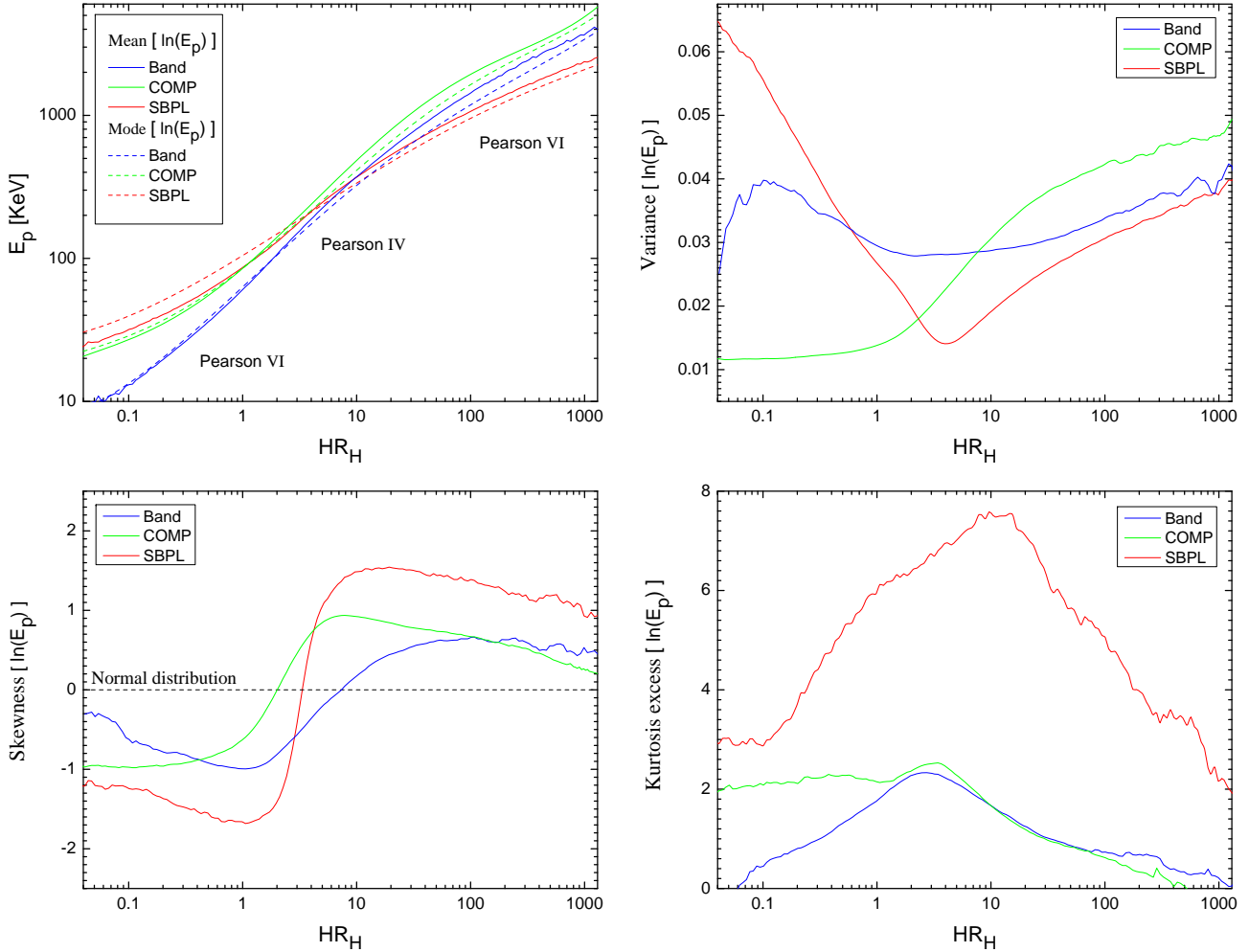


Figure 11. Plots of the first four moments of the conditional distribution $P(\ln(E_{p,obs})|\text{Model}, \ln(HR_H))$ for the three GRB spectral models: Band, COMP(CPL) & SBPL. **Top Left:** Comparison of the modes (dashed curves) and means (solid curves) of $E_{p,obs}$ given HR_H for the 3 spectral models. According to the Pearson's system of statistical distributions (Pearson 1901; Pearson 1895), $P(\ln(E_{p,obs})|\text{Model}, \ln(HR_H))$ for the three GRB models is best characterized by the Pearson's Type IV distribution (unlimited range, skewed) close to the center of BATSE $\ln(HR_H)$ distribution and by the Pearson's Type VI distribution (limited range at one side, skewed) close to the tails of HR_H distribution. **Top Right:** Variance of $\ln(E_{p,obs})$ given HR_H for the three GRB models. **Bottom Left:** Variation of the third standardized moment (skewness) of $P(\ln(E_{p,obs})|\text{Model}, \ln(HR_H))$ vs. HR_H for the three GRB models. The horizontal dashed line, represents the third standardized moment of normal distribution. **Bottom Right:** Variation of the fourth standardized cumulant (Kurtosis excess) vs. HR_H . As it had been implied by the calibration sample before in §2.2, $P(\ln(E_{p,obs})|\text{Model}, \ln(HR_H))$ for all 3 GRB models exhibits a leptokurtic-type behavior by being more peaked and heavy-tailed compared to normal distribution which has zero Kurtosis excess. The fact that $P(\ln(E_{p,obs})|\text{Model}, \ln(HR_H))$ has the highest Kurtosis excess close to the barycenter of simulated data for the Band & SBPL models together with its low variance in the same region, indicates the relative accuracy of HR_H – $E_{p,obs}$ relation in estimating $E_{p,obs}$ close to the barycenter compared to the extreme ends of the relation. By contrast, the uncertainty in $E_{p,obs}$ estimation appears to increase continuously with HR_H for the COMP (CPL) model.

al. 1993),

$$P(\text{Model}) = P(\text{Model}|S/N, HR_H) \quad (19)$$

For example, K06 found that the ability to fit GRBs spectra with the Band and SBPL models depends on S/N , also on whether the break energy of GRB in the two spectral

models is inside the BASTE energy window. Generally, the most probable spectral model for a GRB can be found by simulation given its S/N and HR_H . However, we leave this for the supplemental work to this paper (Shahmoradi & Nemiroff 2009c), and assume here, that $P(\text{Model})$ is independent of S/N and HR_H of the burst. Therefore, the proba-

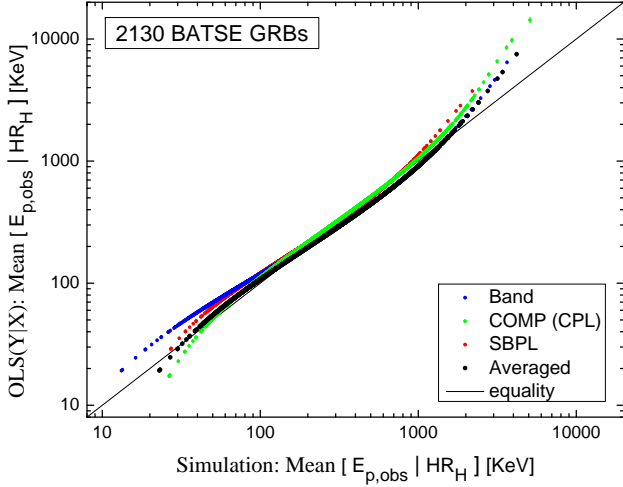


Figure 12. Plot of $\text{Mean}[E_{p,obs}]$ of 2130 GRBs in the BATSE catalog estimated by the $\text{OLS}(E_{p,obs}|HR_H)$ linear regression (§2.2) versus $\text{Mean}[E_{p,obs}]$ estimates of the same bursts derived from the simulation of $HR_H-E_{p,obs}$ relation (§3.2), depicting the significance of the differences between the two estimates given different HR_H . The blue/green/red circles correspond to the estimates of $E_{p,obs}$ of the bursts assuming that all are best fit by the Band/COMP/SBPL models respectively. The black circles represent $E_{p,obs}$ estimates from the $\text{OLS}(E_{p,obs}|HR_H)$ linear regression fit to the entire calibration sample versus weighted averages of $E_{p,obs}$ estimates of the three GRB models derived from the simulation (§3.2). The black solid line represents the equality. As seen, the two model-independent $E_{p,obs}$ estimates (black circles) agree well with each other for almost the entire BATSE catalog GRBs.

bility $P(\ln(E_{p,obs})|\ln(HR_H))$ can be written as,

$$P(\ln(E_{p,obs})|\ln(HR_H)) \propto \quad (20)$$

$$\begin{aligned} & P(\mathbf{Band}) \times P(\ln(E_{p,obs})|\mathbf{Band}, \ln(HR_H)) \\ & + P(\mathbf{COMP}) \times P(\ln(E_{p,obs})|\mathbf{COMP}, \ln(HR_H)) \\ & + P(\mathbf{SBPL}) \times P(\ln(E_{p,obs})|\mathbf{SBPL}, \ln(HR_H)) \end{aligned}$$

where

$$P(\mathbf{Band}) \sim 118/325 \quad (21)$$

$$P(\mathbf{COMP}) \sim 70/325 \quad (22)$$

$$P(\mathbf{SBPL}) \sim 137/325 \quad (23)$$

The above probabilities have been estimated from K06 time-integrated sample of GRBs assuming that the global fraction of GRBs best fit by each of the spectral models are the same as the fractions found in K06 sample of GRBs. This might not be far from the truth, since the brightness of GRBs in K06 sample, assures us that the spectral fits are not biased due to low S/N . The averaged 90% Prediction Interval (PI) for $HR_H-E_{p,obs}$ relation is depicted in Figure 10 (*bottom right*). The 5th order polynomial fits to 90% prediction intervals are also given in Table 1.

Based on the linear regression fits in §2.2, and the sim-

ulated conditional probabilities $P(\ln(E_{p,obs})|\ln(HR_H))$ & PIs for the three GRB models in §3.2, the mean and the most probable $E_{p,obs}$ of 2130 BATSE catalog GRBs are estimated and tabulated in Table 4.

It is useful to examine the behavior of the conditional probability $P(E_{p,obs}|\text{Model}, HR_H)$ for the 3 GRB models for different HR_H . Figure 11 depicts the plots of the first four moments of $P(E_{p,obs}|\text{Model}, HR_H)$ given HR_H . As seen, the conditional densities appear to be significantly different from the normal distribution by being highly skewed and leptokurtic. The plots also clarify the patterns of heteroscedasticity in the linear regressions discussed in §2.2. Although in such cases, the OLS linear regressions are not *BLUE*, comparison of $\text{Mean}[E_{p,obs}]$ of 2130 BATSE GRBs derived from the simulation with their $\text{Mean}[E_{p,obs}]$ estimates by the $\text{OLS}(E_{p,obs}|HR_H)$ linear regression in §2.2, indicates the consistency of two methods over a wide range of BATSE HR_H (Figure 12)

4 DISCUSSION AND SUMMARY

Throughout this work, we presented a simple method of estimating the spectral peak energies of BATSE Gamma Ray Bursts via their hardness ratios HR_H , defined as the sum of the fluences in channels 3 & 4 of BATSE LADs (100-2000 KeV), divided by the sum of the fluences in channels 2 & 1 (20-100 KeV), available in the BATSE GRB catalog. Based on the strong correlation found between HR_H & $E_{p,obs}$ of 249 bright BATSE GRBs, the $HR_H-E_{p,obs}$ relation was constructed and shown to be linear over the wide energy range of BATSE (§2.2). Although the relation is calibrated by a sample of 249 bright GRBs, since the hardness ratio is independent of GRB brightness, the relation can be used for nearly the entire BATSE sample: 2130 GRBs.

Using Makov Chain Monte Carlo techniques, we also presented a careful multivariate analysis of GRB spectral parameters for the three main GRB spectral models: Band, COMP (CPL) & SBPL, subject to the possible effects of data truncation and sample-incompleteness on the observational data (§3.1). Similar to Shahmoradi & Nemiroff (2009a), we find indications of significant – and in some cases strong – positive correlations among the high-/low-energy photon indices of the bright BATSE GRBs and their $E_{p,obs}$. Investigation of the origins of such positive trends requires an accurate modeling of the possible role of the limited BATSE energy window in shaping the distribution of BATSE GRBs' spectral parameters. In general, the evolution of the photon indices with $E_{p,obs}$, if intrinsic to GRBs, should be sought in the time-resolved spectral analyses of BATSE GRBs where the possible effects of the dispersion of $E_{p,obs}$ distribution due to cosmological redshifts are eliminated (e.g. K06; Lloyd-Ronning & Petrosian 2002; Crider et al. 1997).

Based on the results of the multivariate analysis of observational data we also derived the 90% prediction intervals for $HR_H-E_{p,obs}$ relation (§3.2 & Table 1). These

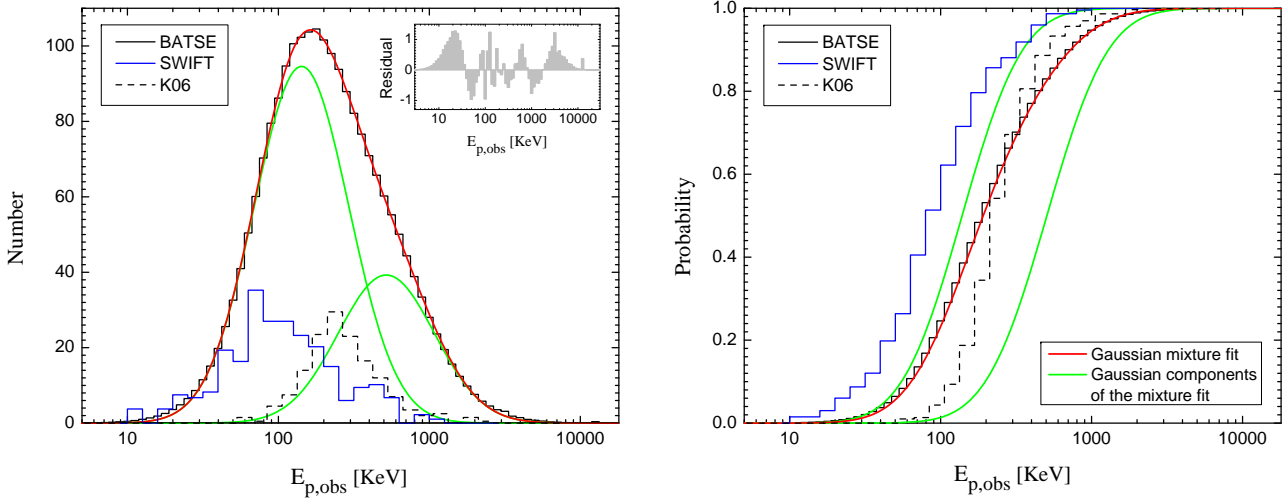


Figure 13. Left: The asymptotic $E_{p,obs}$ distribution of 2130 BATSE GRBs derived from the integration of the conditional probability densities $P(E_{p,obs}|HR_H)$ over the entire BATSE catalog of GRB hardness ratios (Eqn. (24)). Mixture decomposition of the BATSE catalog $E_{p,obs}$ distribution (black solid line) indicates that the distribution is well fit by the sum of two Gaussians (green solid lines) resulting in a reduced χ^2 value of 0.26. The inset graph, represents the residuals of the fit. By contrast, a single Gaussian results in a poor fit to the BATSE catalog $E_{p,obs}$ distribution at $> 99.9\%$ confidence level with a resulting reduced χ^2 value of 9.6. The parameter estimates of the fits are given in Table 2. The two Gaussians might represent the $E_{p,obs}$ distribution of BATSE LGRBs and SGRBs peaking at ~ 140 KeV & ~ 520 KeV respectively. The dashed-line histogram represents the $E_{p,obs}$ distribution of 299 bright BATSE GRBs in K06. Although K06 sample mainly consists of LGRBs, the $E_{p,obs}$ distribution of the sample is biased towards harder bursts, as it had been predicted in Figure 7. The solid blue histogram represents the $E_{p,obs}$ distribution of SWIFT LGRBs taken from Butler et al. (2009b). As expected, the SWIFT GRBs appear to be much softer than BATSE GRBs, due to the relative energy sensitivity of SWIFT as compared to BATSE. **Right:** Normalized cumulative $E_{p,obs}$ distribution of 2130 BATSE catalog GRBs. The lines and colors have the same meaning as in the left plot. Assuming that the two Gaussians in the mixture fit to the BATSE $E_{p,obs}$ distribution represent the $E_{p,obs}$ density functions of BATSE LGRBs and SGRBs, then strong limits can be set on the fraction of BATSE LGRBs/SGRBs having an $E_{p,obs}$ larger/smaller than a specified $E_{p,obs}$. These limits might represent the global fractions of LGRBs/SGRBs having an $E_{p,obs}$ larger/smaller than a specified $E_{p,obs}$, provided that the effects of BATSE LAD's limited energy window (20 – 2000 KeV) on the global distribution of $E_{p,obs}$ of GRBs are negligible.

estimates were then used to create a complete catalog of $E_{p,obs}$ estimates for 2130 BATSE GRBs with measured fluences available in the BATSE catalog (Table 4). These estimates might be very useful in population studies of Long- & Short-duration GRBs, also in the studies of GRB hardness-brightness correlations (e.g. Shahmoradi & Nemiroff 2009a) and the possible use of GRBs as cosmological tools.

As an immediate outcome of the analyses presented here, we have derived a probabilistic $E_{p,obs}$ distribution of the entire BATSE GRBs for the first time by integrating the simulated conditional distributions $P(E_{p,obs}|HR_H)$ (Eqn. (20)) in §3.2 over the entire BATSE catalog GRB hardness ratios (Figure 13),

$$P(E_{p,obs}) \propto \sum_{i=1}^{2130} P(E_{p,obs}|HR_{H,i}) \quad (24)$$

As it was expected (e.g. Kouveliotou et al. 1993), the resulting distribution is significantly different from a single Gaussian distribution. By contrast, the sum of two Gaussians provides a better fit than the single Gaussian at 0.001 significance level. The two fits are summarized in Table 2.

Assuming a log-normal distribution for the $E_{p,obs}$ of BATSE LGRBs and SGRBs, the two Gaussian components of the mixture likely represent the $E_{p,obs}$ probability density functions of Long- & Short-duration BATSE GRBs with peaks at ~ 140 KeV & ~ 520 KeV respectively.

It should be noted that although we focused our attention only on a specific definition of hardness ratio, other definitions might also show a strong correlation with $E_{p,obs}$. In particular, the hardness ratios defined by the raw photon counts of GRBs might even appear as better and more straightforward estimators of $E_{p,obs}$, since their calculations does not require folding of GRBs spectra with the Detector Response Matrices.

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Table 1. Coefficients of the 5th order polynomial fits to the means & modes of $P(E_{p,obs}|\text{Model}, HR_H)$ and the corresponding 90% prediction intervals represented by Upper and Lower Confidence Levels (UCL & LCL) for the three GRB spectral models: Band, COMP (CPL) & SBPL. Also presented are the coefficients of the 5th order polynomial fits to the mean of the weighted average of $P(E_{p,obs}|\text{Model}, HR_H)$ of the three GRB models and the corresponding 90% UCL and LCL derived in §3.2.

	a_0	a_1	a_2	a_3	a_4	a_5
Band						
UCL	2.0	0.74	0.15	-0.047	-0.026	0.0067
LCL	1.5	0.83	0.065	-0.071	-0.008	0.0055
Mean	1.8	0.79	0.036	-0.06	0.0078	0.00032
Mode	1.8	0.74	0.0094	-0.048	0.0083	0.00021
COMP (CPL)						
UCL	2.14	0.81	0.19	-0.094	-0.024	0.0098
LCL	1.74	0.66	0.11	-0.06	-0.012	0.0053
Mean	1.95	0.68	0.15	-0.061	-0.022	0.0074
Mode	1.92	0.62	0.12	-0.046	-0.013	0.0044
SBPL						
UCL	2.16	0.5	0.19	-0.027	-0.038	0.0088
LCL	1.7	0.7	0.021	-0.049	-0.0094	0.0051
Mean	2.0	0.56	0.057	-0.034	-0.0011	0.00098
Mode	2.02	0.49	0.041	-0.026	0.0003	0.00057
Weighted Average of the 3 GRB models						
UCL	2.1	0.62	0.23	-0.049	-0.04	0.01
LCL	1.6	0.84	0.045	-0.1	0.0054	0.0048
Mean	1.9	0.68	0.11	-0.06	-0.012	0.0055

NOTE. – The desired parameter can be estimated according to the equation:

$$y = a_0 + a_1x + a_2x^2 + a_3x^3 + a_4x^4 + a_5x^5,$$

where y represents the logarithm of the parameter to be estimated and x represents $\log(HR_H)$. In general, the 90% prediction intervals, represented by UCL & LCL, should always be reported with the estimated mean/mode of $E_{p,obs}$.

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Table 2. Parameter estimates of the Gaussian mixture and single Gaussian fits to the derived asymptotic $\log(E_{p,obs})$ distribution of 2130 BATSE catalog GRBs based on Eqn. (24).

Model	\hat{A}	$\hat{\mu}$	$\hat{\sigma}^2$	Area	$\chi^2/\text{d.o.f}$
(1)	(2)	(3)	(4)	(5)	(6)
Mixture	—	—	—	—	0.26
Component 1	94.61	2.15	0.10	0.70	—
Component 2	39.28	2.71	0.10	0.30	—
Single Gaussian	102.55	2.28	0.17	—	9.6

NOTE. – column (2), (3), (4) & (6) represent the maximum heights (normalization factors), means, variances and the reduced χ^2 values of the Gaussian fits respectively. Column (5) represents the relative contributions of the two Gaussian components to the mixture fit. The standard errors on all estimated parameters are on the order of the third decimal places and therefore not reported.

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Table 3: Summary of the spectral properties of 249 BATSE GRBs used to calibrate the linear $HR_H-E_{p,obs}$ relation in §2.2.*

Trigger ^a (1)	Model ^b (2)	HR_H ^c (3)	A ^d (4)	$E_{p,obs}$ ^e (5)	α ^f (6)	β ^g (7)	E_{break} ^h (8)	Λ ⁱ (9)
105	SBPL	1.41 ± 0.12	3.28 ± 0.03	130 ± 17	-0.97 ± 0.08	-2.96 ± 0.13	126 ± 14	0.4
109	COMP	4.02 ± 0.08	0.81 ± 0.04	523 ± 87	-1.24 ± 0.06	—	—	—
130	BAND	3.80 ± 0.10	1.1 ± 0.15	180 ± 23	-1.23 ± 0.13	-2.33 ± 0.22	141 ± 31	—
143	SBPL	20.95 ± 0.13	4.82 ± 0.01	586 ± 28	-1.06 ± 0.01	-2.22 ± 0.03	420 ± 13	0.2
219	SBPL	3.49 ± 0.11	1.98 ± 0.01	240 ± 12	-1.23 ± 0.02	-2.28 ± 0.03	191 ± 8	0.2
226	COMP	6.34 ± 0.25	0.37 ± 0.03	404 ± 63	-1.05 ± 0.10	—	—	—
249	SBPL	7.09 ± 0.04	3.55 ± 0.01	446 ± 22	-1.06 ± 0.01	-3.30 ± 0.07	537 ± 21	0.5
298	SBPL	15.45 ± 0.47	1.31 ± 0.03	389 ± 67	-1.24 ± 0.04	-2.40 ± 0.28	387 ± 66	0.01
351	COMP	3.72 ± 0.20	0.39 ± 0.03	174 ± 12	-1.42 ± 0.08	—	—	—
394	BAND	4.60 ± 0.10	1.72 ± 0.05	315 ± 13	-0.91 ± 0.03	-2.03 ± 0.04	175 ± 9	—
444	BAND	2.36 ± 0.25	51.8 ± 50.8	91 ± 13	0.18 ± 0.65	-2.11 ± 0.07	60 ± 7	—
451	BAND	1.91 ± 0.07	3.32 ± 0.19	143 ± 8	-1.47 ± 0.05	-2.41 ± 0.10	139 ± 16	—
543	COMP	2.90 ± 0.10	3.76 ± 0.11	263 ± 8	-0.97 ± 0.03	—	—	—
647	BAND	2.63 ± 0.06	4.99 ± 0.21	190 ± 3	-0.19 ± 0.05	-3.34 ± 0.17	178 ± 9	—
676	BAND	9.22 ± 0.18	0.71 ± 0.08	315 ± 36	-0.52 ± 0.14	-2.33 ± 0.25	204 ± 35	—
761	SBPL	4.30 ± 0.17	0.63 ± 0.4	285 ± 25	-1.24 ± 0.02	-2.43 ± 0.10	250 ± 17	0.2
973	SBPL	5.89 ± 0.13	1.49 ± 0.01	251 ± 27	-1.35 ± 0.03	-2.08 ± 0.03	156 ± 10	0.2
999	BAND	8.42 ± 0.38	2.73 ± 0.29	265 ± 26	-0.60 ± 0.11	-1.95 ± 0.06	140 ± 14	—
1025	SBPL	2.23 ± 0.13	4.66 ± 0.08	131 ± 6	-1.12 ± 0.05	-2.59 ± 0.06	125 ± 6	0.1
1121	SBPL	5.10 ± 0.10	1.37 ± 0.01	250 ± 16	-1.46 ± 0.01	-2.13 ± 0.04	213 ± 11	0.1
1122	BAND	3.15 ± 0.06	4.55 ± 0.16	157 ± 3	-0.93 ± 0.03	-2.48 ± 0.04	127 ± 4	—
1156	COMP	7.09 ± 0.57	0.17 ± 0.03	383 ± 174	-1.25 ± 0.24	—	—	—
1157	BAND	5.01 ± 0.13	2.19 ± 0.11	203 ± 9	-1.00 ± 0.05	-2.21 ± 0.05	135 ± 8	—
1288	SBPL	3.76 ± 0.16	0.7 ± 0.01	233 ± 22	-1.27 ± 0.04	-2.31 ± 0.11	211 ± 18	0.1
1385	SBPL	13.00 ± 0.25	0.97 ± 0.01	417 ± 52	-0.88 ± 0.02	-3.57 ± 0.28	488 ± 46	0.4
1419	COMP	2.34 ± 0.11	0.48 ± 0.02	213 ± 17	-1.65 ± 0.04	—	—	—
1440	SBPL	5.32 ± 0.17	0.9 ± 0.01	248 ± 25	-1.07 ± 0.03	-2.57 ± 0.10	209 ± 16	0.3
1468	COMP	40.43 ± 1.45	0.34 ± 0.01	811 ± 54	-0.55 ± 0.05	—	—	—
1480	BAND	16.67 ± 0.76	0.9 ± 0.29	246 ± 66	-0.50 ± 0.33	-1.76 ± 0.09	116 ± 29	—
1484	SBPL	2.47 ± 0.18	3.58 ± 0.04	162 ± 9	-1.50 ± 0.02	-2.63 ± 0.08	166 ± 9	0.1
1503	SBPL	1.10 ± 0.04	1.7 ± 0.02	104 ± 8	-1.54 ± 0.04	-3.22 ± 0.14	131 ± 9	0.2
1541	SBPL	7.69 ± 0.06	1.25 ± 0.01	290 ± 27	-1.25 ± 0.02	-2.58 ± 0.09	266 ± 20	0.3
1571	COMP	4.67 ± 0.62	0.59 ± 0.03	297 ± 42	-1.58 ± 0.06	—	—	—
1601	COMP	31.08 ± 1.93	0.48 ± 0.01	872 ± 68	-0.67 ± 0.05	—	—	—
1606	SBPL	3.46 ± 0.07	1.15 ± 0.01	189 ± 30	-1.41 ± 0.04	-2.80 ± 0.19	209 ± 28	0.3
1609	BAND	4.65 ± 0.08	4.06 ± 0.08	262 ± 7	-1.03 ± 0.02	-2.51 ± 0.07	213 ± 11	—
1623	BAND	11.54 ± 0.46	0.55 ± 0.02	522 ± 47	-0.87 ± 0.05	-2.53 ± 0.39	396 ± 97	—
1625	SBPL	13.32 ± 0.12	3.26 ± 0.01	383 ± 15	-1.07 ± 0.01	-2.30 ± 0.03	295 ± 9	0.2
1652	BAND	2.26 ± 0.10	1.41 ± 0.14	129 ± 6	-1.13 ± 0.09	-2.73 ± 0.22	131 ± 18	—
1663	SBPL	14.91 ± 0.09	4.18 ± 0.01	409 ± 13	-1.12 ± 0.01	-2.30 ± 0.03	319 ± 8	0.2
1676	BAND	3.45 ± 0.09	1.73 ± 0.05	206 ± 7	-1.25 ± 0.03	-2.85 ± 0.22	233 ± 32	—
1709	BAND	2.39 ± 0.09	5.45 ± 0.17	192 ± 5	-1.09 ± 0.03	-3.06 ± 0.23	221 ± 26	—
1711	SBPL	7.47 ± 0.16	3.07 ± 0.02	284 ± 20	-1.14 ± 0.02	-3.26 ± 0.19	311 ± 19	0.2
1712	SBPL	3.83 ± 0.14	0.48 ± 0.01	178 ± 13	-1.37 ± 0.04	-2.53 ± 0.10	175 ± 12	0.1
1886	SBPL	20.99 ± 0.23	2.85 ± 0.02	560 ± 47	-0.43 ± 0.03	-2.58 ± 0.06	315 ± 18	0.5
1997	BAND	3.18 ± 0.14	2.94 ± 1.84	66 ± 8	-1.08 ± 0.37	-2.06 ± 0.02	48 ± 4	—

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Trigger ^a	Model ^b	HR_H ^c	A ^d	$E_{p,obs}$ ^e	α ^f	β ^g	E_{break} ^h	Λ ⁱ
2061	COMP	8.54 ± 0.25	0.53 ± 0.05	294 ± 26	-0.65 ± 0.13	—	—	—
2080	BAND	3.96 ± 0.15	1.36 ± 0.05	303 ± 18	-1.12 ± 0.04	-2.39 ± 0.14	231 ± 28	—
2090	BAND	3.41 ± 0.16	1.13 ± 0.07	183 ± 9	-1.05 ± 0.06	-2.40 ± 0.10	143 ± 12	—
2110	BAND	13.01 ± 0.29	1.2 ± 0.02	459 ± 16	-0.66 ± 0.03	-3.00 ± 0.29	415 ± 51	—
2122	COMP	8.62 ± 0.43	0.47 ± 0.02	393 ± 84	-1.58 ± 0.06	—	—	—
2138	SBPL	3.11 ± 0.08	0.91 ± 0.01	161 ± 13	-1.65 ± 0.02	-2.73 ± 0.10	191 ± 14	0.2
2151	COMP	22.27 ± 0.50	7.21 ± 0.25	534 ± 86	-1.46 ± 0.06	—	—	—
2156	SBPL	8.31 ± 0.09	1.29 ± 0.01	281 ± 33	-1.45 ± 0.02	-2.30 ± 0.06	228 ± 21	0.3
2193	BAND	9.44 ± 0.33	1.4 ± 0.06	282 ± 7	0.47 ± 0.07	-2.89 ± 0.15	204 ± 10	—
2228	BAND	3.47 ± 0.13	1.37 ± 0.07	204 ± 8	-0.92 ± 0.05	-2.45 ± 0.09	156 ± 11	—
2287	COMP	3.00 ± 0.18	0.6 ± 0.02	331 ± 16	-1.03 ± 0.04	—	—	—
2316	BAND	3.32 ± 0.10	2.26 ± 0.07	157 ± 6	-1.57 ± 0.03	-2.57 ± 0.11	195 ± 23	—
2387	SBPL	3.41 ± 0.13	1.17 ± 0.01	135 ± 21	0.07 ± 0.28	-2.48 ± 0.06	69 ± 9	0.4
2389	SBPL	2.05 ± 0.07	1.31 ± 0.01	142 ± 11	-1.19 ± 0.03	-5.03 ± 0.39	224 ± 15	0.3
2431	BAND	4.05 ± 0.18	17.3 ± 0.78	199 ± 8	-0.99 ± 0.04	-2.19 ± 0.03	131 ± 6	—
2450	COMP	3.38 ± 0.20	0.91 ± 0.04	227 ± 9	-1.11 ± 0.04	—	—	—
2514	SBPL	9.76 ± 0.52	8.53 ± 0.17	208 ± 22	-1.34 ± 0.04	-2.76 ± 0.20	212 ± 21	0.1
2522	BAND	3.66 ± 0.25	1.12 ± 0.23	200 ± 11	0.91 ± 0.23	-2.00 ± 0.06	112 ± 6	—
2533	BAND	12.71 ± 0.12	2.69 ± 0.03	413 ± 8	-0.87 ± 0.01	-2.32 ± 0.04	278 ± 9	—
2537	BAND	1.35 ± 0.05	13.8 ± 0.5	94 ± 1	-1.40 ± 0.03	-2.88 ± 0.07	129 ± 6	—
2606	COMP	8.96 ± 0.24	0.53 ± 0.8	281 ± 56	-1.01 ± 0.18	—	—	—
2611	SBPL	10.71 ± 0.34	5.52 ± 0.04	511 ± 73	-1.21 ± 0.02	-2.83 ± 0.20	519 ± 59	0.3
2679	SBPL	138.50 ± 5.30	2.41 ± 0.09	792 ± 212	-0.54 ± 0.05	-2.13 ± 0.24	599 ± 94	0.1
2700	SBPL	4.82 ± 0.29	0.44 ± 0.01	177 ± 26	-1.23 ± 0.07	-2.72 ± 0.21	175 ± 22	0.2
2703	SBPL	6.15 ± 0.27	0.39 ± 0.4	282 ± 29	-1.36 ± 0.02	-2.53 ± 0.18	276 ± 26	0.1
2790	SBPL	3.14 ± 0.17	0.81 ± 0.01	188 ± 8	-1.59 ± 0.02	-2.60 ± 0.08	189 ± 8	0.01
2797	SBPL	5.25 ± 0.25	3.3 ± 0.03	255 ± 26	-1.00 ± 0.03	-2.57 ± 0.11	210 ± 17	0.3
2798	SBPL	12.43 ± 0.12	2.69 ± 0.01	379 ± 31	-1.13 ± 0.02	-2.25 ± 0.04	245 ± 13	0.3
2812	BAND	4.42 ± 0.21	1.75 ± 0.05	242 ± 8	-1.10 ± 0.03	-3.03 ± 0.35	273 ± 49	—
2831	SBPL	8.23 ± 0.04	1.78 ± 0.4	503 ± 24	-1.29 ± 0.00	-2.21 ± 0.03	382 ± 14	0.2
2852	SBPL	7.51 ± 0.16	1.71 ± 0.01	307 ± 25	-1.05 ± 0.02	-3.14 ± 0.16	327 ± 21	0.3
2855	SBPL	16.39 ± 0.18	1.84 ± 0.01	360 ± 19	-0.61 ± 0.03	-2.43 ± 0.05	241 ± 9	0.3
2856	SBPL	14.03 ± 0.20	1.82 ± 0.01	299 ± 30	-1.24 ± 0.02	-2.32 ± 0.09	245 ± 19	0.2
2863	SBPL	6.14 ± 0.54	0.58 ± 0.01	243 ± 46	-1.05 ± 0.06	-2.49 ± 0.25	208 ± 31	0.2
2889	SBPL	10.34 ± 0.27	0.55 ± 0.01	218 ± 13	-0.93 ± 0.04	-2.11 ± 0.08	212 ± 12	0.01
2891	COMP	23.05 ± 0.40	0.9 ± 0.01	1120 ± 60	-0.94 ± 0.02	—	—	—
2919	BAND	7.44 ± 0.34	1.67 ± 0.09	359 ± 53	-1.32 ± 0.05	-2.09 ± 0.13	216 ± 45	—
2993	COMP	31.07 ± 0.90	0.57 ± 0.01	2040 ± 219	-1.02 ± 0.02	—	—	—
2994	COMP	19.30 ± 0.36	1.16 ± 0.01	1100 ± 55	-1.13 ± 0.01	—	—	—
3035	COMP	4.71 ± 0.12	1.09 ± 0.03	263 ± 12	-1.30 ± 0.03	—	—	—
3042	BAND	6.47 ± 0.20	1.12 ± 0.04	250 ± 11	-1.07 ± 0.03	-2.47 ± 0.13	200 ± 20	—
3057	SBPL	15.05 ± 0.06	3.36 ± 0.01	620 ± 35	-1.08 ± 0.01	-2.39 ± 0.04	417 ± 15	0.4
3067	BAND	6.57 ± 0.10	4.93 ± 0.1	388 ± 18	-1.15 ± 0.02	-2.32 ± 0.08	279 ± 22	—
3071	COMP	3.53 ± 0.37	0.43 ± 0.06	241 ± 35	-1.17 ± 0.15	—	—	—
3087	BAND	7.24 ± 0.85	21 ± 4.31	182 ± 20	-0.59 ± 0.19	-2.22 ± 0.10	118 ± 13	—
3110	COMP	48.02 ± 8.78	0.98 ± 0.03	567 ± 22	-0.08 ± 0.06	—	—	—
3115	SBPL	6.07 ± 0.33	0.92 ± 0.01	255 ± 20	-0.97 ± 0.03	-2.29 ± 0.07	190 ± 11	0.2
3128	BAND	9.91 ± 0.12	2.49 ± 0.05	363 ± 9	-0.54 ± 0.03	-2.32 ± 0.05	234 ± 9	—
3138	COMP	2.47 ± 0.16	2.15 ± 0.07	177 ± 5	-1.38 ± 0.04	—	—	—

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Trigger ^a	Model ^b	HR_H ^c	A ^d	$E_{p,obs}$ ^e	α ^f	β ^g	E_{break} ^h	Λ ⁱ
3227	SBPL	5.58 ± 0.09	0.94 ± 0.01	257 ± 20	-1.33 ± 0.02	-2.30 ± 0.06	213 ± 13	0.2
3245	SBPL	9.41 ± 0.06	2.47 ± 0.01	291 ± 8	-1.07 ± 0.01	-2.30 ± 0.02	225 ± 5	0.2
3247	COMP	7.67 ± 0.43	0.2 ± 0.02	358 ± 53	-0.75 ± 0.14	—	—	—
3255	COMP	1.28 ± 0.08	1.24 ± 0.02	91 ± 2	-1.99 ± 0.00	—	—	—
3287	SBPL	3.92 ± 0.17	0.84 ± 0.01	168 ± 16	-1.46 ± 0.04	-2.48 ± 0.12	165 ± 15	0.1
3290	SBPL	1.83 ± 0.10	0.85 ± 0.01	127 ± 18	-1.77 ± 0.03	-2.80 ± 0.18	169 ± 21	0.2
3301	BAND	15.06 ± 0.62	0.76 ± 0.04	427 ± 48	-0.85 ± 0.06	-1.98 ± 0.11	222 ± 31	—
3330	SBPL	13.58 ± 0.42	0.4 ± 0.01	536 ± 581	-1.00 ± 0.04	-2.05 ± 0.11	271 ± 32	0.2
3345	SBPL	4.08 ± 0.20	2.05 ± 0.03	166 ± 16	-1.46 ± 0.03	-2.16 ± 0.06	145 ± 12	0.1
3352	BAND	1.51 ± 0.14	1.75 ± 0.09	143 ± 4	-1.14 ± 0.05	-2.57 ± 0.09	132 ± 8	—
3360	BAND	35.66 ± 1.20	0.31 ± 0.03	565 ± 176	-1.00 ± 0.09	-1.55 ± 0.06	169 ± 53	—
3408	BAND	6.40 ± 0.08	2.98 ± 0.03	308 ± 5	-1.04 ± 0.01	-2.70 ± 0.08	279 ± 14	—
3410	COMP	2.23 ± 0.13	6.62 ± 2.04	120 ± 9	-0.78 ± 0.29	—	—	—
3415	SBPL	2.55 ± 0.09	0.97 ± 0.01	168 ± 27	-1.51 ± 0.04	-2.81 ± 0.19	199 ± 28	0.3
3458	BAND	5.44 ± 0.13	3.44 ± 0.08	257 ± 5	-0.49 ± 0.03	-2.62 ± 0.06	193 ± 6	—
3464	COMP	5.13 ± 0.31	0.62 ± 0.03	321 ± 27	-1.14 ± 0.06	—	—	—
3480	BAND	8.75 ± 0.23	2.93 ± 0.1	341 ± 14	-0.56 ± 0.04	-2.64 ± 0.16	258 ± 21	—
3481	BAND	7.71 ± 0.15	1.46 ± 0.05	347 ± 24	-1.08 ± 0.04	-2.07 ± 0.07	200 ± 19	—
3489	BAND	6.62 ± 0.17	3.08 ± 0.08	314 ± 9	-0.70 ± 0.04	-3.33 ± 0.34	329 ± 42	—
3491	SBPL	3.60 ± 0.05	4.51 ± 0.02	186 ± 9	-1.65 ± 0.01	-2.31 ± 0.03	180 ± 8	0.2
3492	SBPL	8.43 ± 0.08	2.07 ± 0.01	373 ± 63	-1.50 ± 0.01	-2.75 ± 0.18	453 ± 59	0.4
3593	COMP	16.03 ± 0.38	0.63 ± 0.01	1240 ± 114	-1.16 ± 0.02	—	—	—
3634	BAND	7.18 ± 0.45	0.48 ± 0.08	229 ± 26	-0.55 ± 0.17	-2.25 ± 0.19	146 ± 21	—
3658	BAND	5.40 ± 0.12	5.36 ± 0.19	221 ± 6	-0.66 ± 0.03	-2.31 ± 0.05	148 ± 5	—
3663	COMP	5.13 ± 0.32	0.18 ± 0.01	505 ± 158	-1.51 ± 0.07	—	—	—
3736	COMP	20.93 ± 1.05	1.02 ± 0.04	920 ± 159	-0.89 ± 0.08	—	—	—
3765	BAND	3.65 ± 0.08	1.58 ± 0.05	220 ± 6	-0.97 ± 0.03	-2.58 ± 0.10	185 ± 12	—
3788	BAND	3.42 ± 0.10	3.34 ± 0.2	175 ± 5	-0.48 ± 0.06	-2.24 ± 0.04	114 ± 4	—
3860	BAND	22.39 ± 0.43	1.08 ± 0.02	535 ± 24	-0.57 ± 0.03	-2.33 ± 0.11	341 ± 26	—
3870	BAND	3.26 ± 0.16	2.42 ± 0.33	118 ± 19	-1.61 ± 0.01	-2.03 ± 0.03	76 ± 11	—
3891	BAND	3.79 ± 0.31	1.29 ± 0.25	145 ± 13	-0.69 ± 0.16	-2.05 ± 0.06	88 ± 8	—
3917	BAND	15.10 ± 1.21	0.61 ± 0.08	393 ± 82	-0.69 ± 0.17	-2.45 ± 0.66	276 ± 114	—
3918	BAND	5.36 ± 0.42	0.9 ± 0.09	319 ± 38	-0.52 ± 0.12	-1.80 ± 0.07	150 ± 18	—
3929	SBPL	7.62 ± 0.30	1.18 ± 0.01	351 ± 50	-1.39 ± 0.02	-2.48 ± 0.16	332 ± 39	0.2
3930	SBPL	15.48 ± 0.20	1.37 ± 0.01	430 ± 28	-1.16 ± 0.01	-2.48 ± 0.08	377 ± 19	0.2
3954	BAND	9.11 ± 0.29	2.31 ± 0.14	262 ± 24	-1.06 ± 0.06	-1.91 ± 0.04	131 ± 12	—
4039	COMP	21.51 ± 0.55	0.71 ± 0.01	1320 ± 119	-1.12 ± 0.02	—	—	—
4368	SBPL	1.87 ± 0.01	7 ± 0.03	112 ± 20	-0.77 ± 0.19	-2.48 ± 0.03	66 ± 9	0.5
4556	BAND	5.17 ± 0.13	7.19 ± 0.23	235 ± 7	-0.85 ± 0.03	-2.26 ± 0.05	157 ± 7	—
4701	COMP	4.05 ± 0.16	1.21 ± 0.04	232 ± 6	-1.00 ± 0.04	—	—	—
5304	BAND	6.46 ± 0.10	6.11 ± 0.09	285 ± 4	-0.63 ± 0.02	-2.41 ± 0.03	198 ± 5	—
5470	BAND	28.44 ± 1.51	1.49 ± 0.06	940 ± 159	-0.65 ± 0.07	-1.72 ± 0.11	384 ± 75	—
5473	COMP	6.99 ± 0.44	0.48 ± 0.03	354 ± 32	-0.98 ± 0.07	—	—	—
5486	BAND	5.35 ± 0.09	1.77 ± 0.26	184 ± 27	-0.96 ± 0.11	-1.67 ± 0.01	76 ± 10	—
5489	SBPL	4.64 ± 0.16	0.83 ± 0.01	219 ± 19	-1.31 ± 0.02	-2.34 ± 0.08	186 ± 13	0.2
5512	SBPL	8.50 ± 0.35	0.92 ± 0.01	174 ± 11	-1.30 ± 0.03	-2.08 ± 0.06	170 ± 11	0.01
5526	COMP	4.43 ± 0.28	0.44 ± 0.02	270 ± 19	-1.32 ± 0.04	—	—	—
5563	BAND	3.04 ± 0.13	7.63 ± 0.61	171 ± 9	-1.00 ± 0.07	-2.36 ± 0.08	129 ± 9	—
5567	SBPL	7.16 ± 0.12	2.33 ± 0.01	268 ± 14	-1.50 ± 0.01	-2.38 ± 0.06	260 ± 12	0.1

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Trigger ^a	Model ^b	HR_H ^c	A ^d	$E_{p,obs}$ ^e	α ^f	β ^g	E_{break} ^h	Λ ⁱ
5568	BAND	29.17 ± 0.50	3.91 ± 0.12	527 ± 32	-0.51 ± 0.05	-2.33 ± 0.13	335 ± 30	—
5591	COMP	7.50 ± 0.20	0.65 ± 0.05	435 ± 122	-1.40 ± 0.11	—	—	—
5606	BAND	4.73 ± 0.29	0.36 ± 0.08	203 ± 48	-1.15 ± 0.19	-2.13 ± 0.23	130 ± 39	—
5621	BAND	5.41 ± 0.11	7.94 ± 0.56	213 ± 13	-0.90 ± 0.07	-2.06 ± 0.04	125 ± 8	—
5624	BAND	7.28 ± 0.74	1.18 ± 0.25	227 ± 32	-0.31 ± 0.21	-1.88 ± 0.09	118 ± 16	—
5629	BAND	3.77 ± 0.11	3.25 ± 0.1	232 ± 6	-0.88 ± 0.03	-3.00 ± 0.24	233 ± 26	—
5632	COMP	27.28 ± 1.92	0.31 ± 0.01	1210 ± 243	-1.04 ± 0.06	—	—	—
5654	SBPL	6.08 ± 0.10	1.75 ± 0.01	242 ± 11	-0.70 ± 0.02	-2.47 ± 0.04	171 ± 6	0.3
5697	BAND	0.47 ± 0.07	40.3 ± 6.64	54 ± 2	-0.97 ± 0.12	-3.60 ± 0.12	82 ± 6	—
5704	BAND	2.11 ± 0.10	7.05 ± 0.47	151 ± 7	-1.29 ± 0.06	-2.57 ± 0.14	149 ± 17	—
5731	SBPL	2.56 ± 0.25	0.58 ± 0.01	171 ± 58	-1.69 ± 0.05	-2.05 ± 0.10	139 ± 34	0.1
5773	SBPL	1.93 ± 0.03	4.88 ± 0.02	177 ± 6	-0.87 ± 0.01	-4.37 ± 0.13	228 ± 6	0.3
5995	SBPL	23.07 ± 0.22	2.98 ± 0.01	755 ± 80	-0.79 ± 0.01	-2.39 ± 0.06	391 ± 24	0.5
6100	BAND	13.05 ± 0.16	2.08 ± 0.03	560 ± 32	-1.06 ± 0.02	-2.32 ± 0.14	389 ± 48	—
6115	COMP	16.37 ± 0.54	0.48 ± 0.01	487 ± 22	-0.75 ± 0.03	—	—	—
6124	BAND	9.72 ± 0.08	6.73 ± 0.06	402 ± 7	-0.89 ± 0.01	-2.70 ± 0.09	340 ± 17	—
6198	BAND	5.77 ± 0.05	10.4 ± 0.12	338 ± 8	-1.20 ± 0.01	-2.48 ± 0.06	282 ± 14	—
6235	SBPL	8.19 ± 0.14	5.06 ± 0.05	321 ± 33	-0.98 ± 0.03	-3.01 ± 0.18	320 ± 27	0.3
6240	COMP	4.90 ± 0.87	0.48 ± 0.05	365 ± 371	-1.15 ± 0.12	—	—	—
6249	SBPL	8.28 ± 0.58	0.29 ± 0.4	223 ± 25	-1.36 ± 0.03	-2.13 ± 0.13	218 ± 24	0.01
6266	SBPL	6.81 ± 0.25	0.72 ± 0.01	280 ± 24	-1.04 ± 0.02	-2.57 ± 0.13	249 ± 16	0.2
6274	BAND	2.90 ± 0.13	0.97 ± 0.12	126 ± 10	-1.34 ± 0.10	-2.35 ± 0.12	109 ± 15	—
6329	SBPL	3.51 ± 0.10	1.4 ± 0.01	202 ± 19	-1.27 ± 0.02	-2.70 ± 0.11	199 ± 15	0.3
6336	BAND	20.67 ± 0.35	1.96 ± 0.04	805 ± 89	-1.03 ± 0.03	-2.03 ± 0.15	429 ± 77	—
6353	SBPL	1.71 ± 0.10	0.68 ± 0.01	135 ± 11	-1.72 ± 0.02	-2.12 ± 0.04	134 ± 10	0.01
6380	SBPL	5.19 ± 0.38	0.42 ± 0.01	226 ± 33	-1.35 ± 0.03	-2.15 ± 0.12	190 ± 22	0.1
6389	BAND	4.61 ± 0.19	2.36 ± 0.18	203 ± 17	-1.12 ± 0.07	-2.06 ± 0.06	120 ± 12	—
6397	BAND	3.12 ± 0.15	2.46 ± 0.13	186 ± 6	-0.73 ± 0.05	-2.54 ± 0.12	145 ± 10	—
6404	SBPL	2.99 ± 0.11	1.03 ± 0.02	150 ± 14	-1.50 ± 0.04	-2.59 ± 0.14	153 ± 13	0.1
6414	SBPL	6.18 ± 0.47	0.7 ± 0.01	171 ± 21	-1.42 ± 0.03	-2.11 ± 0.08	141 ± 13	0.1
6453	BAND	1.71 ± 0.05	2.23 ± 0.13	102 ± 2	-1.26 ± 0.05	-2.62 ± 0.07	107 ± 6	—
6454	COMP	4.85 ± 0.17	0.2 ± 0.03	381 ± 153	-1.33 ± 0.16	—	—	—
6472	BAND	8.86 ± 0.09	1.46 ± 0.04	298 ± 13	-0.92 ± 0.03	-2.21 ± 0.07	191 ± 12	—
6525	SBPL	3.63 ± 0.21	0.91 ± 0.01	183 ± 13	-1.07 ± 0.03	-2.42 ± 0.13	168 ± 10	0.1
6526	COMP	1.39 ± 0.02	0.97 ± 0.3	128 ± 17	-1.22 ± 0.29	—	—	—
6539	COMP	101.40 ± 5.59	0.49 ± 0.01	2040 ± 251	-0.58 ± 0.05	—	—	—
6560	BAND	2.58 ± 0.12	2.11 ± 0.11	177 ± 5	-0.61 ± 0.05	-2.90 ± 0.21	158 ± 14	—
6570	BAND	3.11 ± 0.21	1.9 ± 0.53	89 ± 6	-1.10 ± 0.19	-2.20 ± 0.04	67 ± 5	—
6576	BAND	10.27 ± 0.17	1.52 ± 0.03	602 ± 56	-1.28 ± 0.03	-2.31 ± 0.22	444 ± 100	—
6581	SBPL	2.94 ± 0.16	0.77 ± 0.01	193 ± 15	-1.57 ± 0.02	-2.21 ± 0.07	190 ± 15	0.01
6587	BAND	7.59 ± 0.06	8.28 ± 0.09	311 ± 5	-0.90 ± 0.01	-2.38 ± 0.03	222 ± 6	—
6593	SBPL	4.72 ± 0.10	2.02 ± 0.01	218 ± 13	-1.23 ± 0.02	-2.30 ± 0.05	176 ± 8	0.2
6615	BAND	10.09 ± 0.33	0.61 ± 0.04	336 ± 25	-0.51 ± 0.07	-2.26 ± 0.20	209 ± 27	—
6629	SBPL	8.21 ± 0.22	0.28 ± 0.4	239 ± 34	-1.39 ± 0.03	-2.14 ± 0.10	202 ± 23	0.1
6630	COMP	3.56 ± 0.09	1.93 ± 0.05	270 ± 13	-1.45 ± 0.03	—	—	—
6642	COMP	7.26 ± 0.41	0.43 ± 0.02	289 ± 14	-0.57 ± 0.07	—	—	—
6665	SBPL	6.05 ± 0.08	4.13 ± 0.02	224 ± 7	-1.21 ± 0.01	-2.33 ± 0.03	183 ± 5	0.2
6694	BAND	18.28 ± 0.73	0.43 ± 0.02	422 ± 30	-0.23 ± 0.08	-2.31 ± 0.19	261 ± 29	—
6763	BAND	4.25 ± 0.53	1.75 ± 0.48	122 ± 15	-0.86 ± 0.20	-2.00 ± 0.05	73 ± 8	—

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Trigger ^a	Model ^b	HR_H ^c	A ^d	$E_{p,obs}$ ^e	α ^f	β ^g	E_{break} ^h	Λ ⁱ
6891	COMP	6.36 ± 0.47	0.5 ± 0.03	434 ± 99	-1.38 ± 0.08	—	—	—
6892	COMP	5.76 ± 0.52	0.28 ± 0.02	308 ± 41	-1.22 ± 0.08	—	—	—
6904	SBPL	67.06 ± 1.07	0.76 ± 0.01	939 ± 180	-0.99 ± 0.02	-2.08 ± 0.29	912 ± 171	0.01
6963	BAND	4.10 ± 0.08	5.27 ± 0.12	214 ± 3	-0.64 ± 0.02	-2.79 ± 0.08	182 ± 7	—
6985	SBPL	7.27 ± 0.08	3.59 ± 0.01	340 ± 25	-1.00 ± 0.01	-2.67 ± 0.07	284 ± 15	0.4
7012	SBPL	4.63 ± 0.12	1.96 ± 0.01	255 ± 16	-1.40 ± 0.01	-25.00 ± 0.08	245 ± 13	0.2
7028	BAND	7.03 ± 0.29	6.2 ± 1	223 ± 20	-0.25 ± 0.18	-2.08 ± 0.07	129 ± 11	—
7113	SBPL	7.95 ± 0.03	6.93 ± 0.01	339 ± 7	-0.93 ± 0.00	-2.74 ± 0.03	289 ± 4	0.3
7170	COMP	21.87 ± 0.33	0.61 ± 0.01	1860 ± 279	-1.23 ± 0.02	—	—	—
7236	COMP	3.08 ± 0.25	0.56 ± 0.03	239 ± 13	-0.94 ± 0.06	—	—	—
7240	BAND	25.93 ± 1.23	1.5 ± 0.07	649 ± 73	-0.54 ± 0.07	-2.26 ± 0.29	395 ± 77	—
7277	BAND	1.82 ± 0.07	5.41 ± 0.95	113 ± 4	-0.64 ± 0.14	-2.45 ± 0.05	88 ± 4	—
7281	BAND	3.06 ± 0.19	21.4 ± 3.45	140 ± 6	-0.23 ± 0.14	-2.54 ± 0.10	103 ± 6	—
7285	COMP	3.93 ± 0.55	0.53 ± 0.08	107 ± 7	-1.42 ± 0.13	—	—	—
7295	COMP	6.84 ± 0.63	1.08 ± 0.07	330 ± 19	-0.32 ± 0.09	—	—	—
7301	SBPL	7.81 ± 0.03	2.08 ± 0.01	386 ± 33	-1.40 ± 0.01	-2.21 ± 0.06	303 ± 18	0.2
7310	COMP	7.65 ± 0.32	0.65 ± 0.02	319 ± 15	-0.79 ± 0.04	—	—	—
7318	COMP	21.75 ± 0.97	1.27 ± 0.02	694 ± 30	-0.62 ± 0.03	—	—	—
7343	SBPL	17.99 ± 0.09	2.75 ± 0.4	444 ± 9	-0.98 ± 0.00	-2.29 ± 0.02	331 ± 4	0.2
7360	COMP	2.57 ± 0.10	1.47 ± 0.05	259 ± 11	-1.13 ± 0.04	—	—	—
7446	BAND	2.57 ± 0.33	3.38 ± 0.27	178 ± 17	-1.46 ± 0.08	-2.67 ± 0.42	214 ± 74	—
7457	COMP	8.87 ± 1.21	0.41 ± 0.04	737 ± 332	-1.07 ± 0.15	—	—	—
7464	SBPL	9.55 ± 0.25	0.89 ± 0.01	326 ± 26	-1.09 ± 0.02	-2.50 ± 0.11	284 ± 18	0.2
7475	BAND	1.86 ± 0.10	2.42 ± 0.12	138 ± 5	-1.31 ± 0.04	-2.36 ± 0.06	118 ± 8	—
7477	SBPL	5.71 ± 0.26	0.79 ± 0.01	216 ± 20	-1.26 ± 0.03	-2.11 ± 0.06	174 ± 12	0.1
7491	BAND	12.41 ± 0.07	5.11 ± 0.03	442 ± 7	-0.91 ± 0.01	-2.36 ± 0.04	306 ± 9	—
7503	SBPL	3.26 ± 0.18	0.55 ± 0.01	154 ± 22	-1.73 ± 0.03	-2.36 ± 0.12	159 ± 22	0.1
7515	BAND	3.73 ± 0.44	2.09 ± 0.28	187 ± 12	-0.32 ± 0.12	-2.20 ± 0.08	117 ± 8	—
7527	BAND	6.50 ± 0.40	4.48 ± 0.11	316 ± 8	-0.44 ± 0.03	-2.51 ± 0.09	222 ± 10	—
7530	BAND	1.93 ± 0.18	21.3 ± 2.15	147 ± 4	-0.17 ± 0.09	-2.73 ± 0.12	115 ± 6	—
7549	BAND	5.15 ± 0.05	2.62 ± 0.05	269 ± 8	-1.07 ± 0.02	-2.08 ± 0.03	159 ± 6	—
7560	BAND	1.87 ± 0.09	1.27 ± 0.09	136 ± 6	-1.24 ± 0.05	-2.41 ± 0.09	117 ± 10	—
7575	COMP	12.94 ± 0.16	1.09 ± 0.03	478 ± 33	-0.83 ± 0.04	—	—	—
7647	COMP	29.70 ± 1.12	0.3 ± 0.01	2560 ± 1060	-1.33 ± 0.05	—	—	—
7660	COMP	8.44 ± 0.49	0.38 ± 0.02	498 ± 53	-0.99 ± 0.06	—	—	—
7678	SBPL	8.52 ± 0.07	2.24 ± 0.01	285 ± 14	-1.04 ± 0.02	-2.33 ± 0.04	222 ± 9	0.2
7688	SBPL	8.52 ± 0.37	0.39 ± 0.01	207 ± 37	-1.13 ± 0.07	-2.22 ± 0.20	177 ± 25	0.1
7695	SBPL	25.04 ± 0.26	2.18 ± 0.01	725 ± 95	-0.90 ± 0.01	-4.17 ± 0.41	991 ± 96	0.4
7703	COMP	3.76 ± 1.16	0.82 ± 0.12	231 ± 38	-1.15 ± 0.15	—	—	—
7788	BAND	4.81 ± 0.27	1.23 ± 0.19	127 ± 9	-0.85 ± 0.11	-2.03 ± 0.04	78 ± 5	—
7794	BAND	4.20 ± 0.20	0.55 ± 0.04	220 ± 27	-1.28 ± 0.07	-2.25 ± 0.20	161 ± 36	—
7810	BAND	21.44 ± 1.16	0.91 ± 0.03	622 ± 47	-0.35 ± 0.07	-2.76 ± 0.49	467 ± 99	—
7868	BAND	3.11 ± 0.18	1.34 ± 0.13	144 ± 5	-0.50 ± 0.08	-2.52 ± 0.09	110 ± 6	—
7884	COMP	6.63 ± 0.27	0.63 ± 0.03	636 ± 129	-1.23 ± 0.06	—	—	—
7906	BAND	5.36 ± 0.03	9.17 ± 0.07	394 ± 7	-1.12 ± 0.01	-2.30 ± 0.03	278 ± 8	—
7929	SBPL	13.22 ± 0.23	0.82 ± 0.4	343 ± 22	-1.36 ± 0.01	-2.10 ± 0.06	336 ± 22	0.01
7932	BAND	2.42 ± 0.14	1.48 ± 0.2	135 ± 9	-1.13 ± 0.12	-2.51 ± 0.14	120 ± 14	—
7938	COMP	3.35 ± 0.37	0.7 ± 0.09	145 ± 8	-1.07 ± 0.13	—	—	—
7948	COMP	1.35 ± 0.30	0.95 ± 0.23	68 ± 4	-1.07 ± 0.18	—	—	—

Continued on next page

Trigger ^a	Model ^b	HR_H ^c	A ^d	$E_{p,obs}$ ^e	α ^f	β ^g	E_{break} ^h	Λ ⁱ
7954	BAND	3.69 ± 0.06	6.71 ± 0.14	220 ± 4	-0.83 ± 0.02	-2.70 ± 0.08	189 ± 8	—
7976	COMP	5.18 ± 0.22	0.62 ± 0.02	311 ± 16	-1.07 ± 0.04	—	—	—
7994	SBPL	7.49 ± 0.16	1.42 ± 0.01	254 ± 16	-0.60 ± 0.03	-3.22 ± 0.13	242 ± 12	0.3
8008	BAND	11.06 ± 0.24	2.34 ± 0.04	497 ± 15	-0.64 ± 0.02	-2.46 ± 0.10	346 ± 20	—
8087	SBPL	16.35 ± 0.46	0.21 ± 0.4	329 ± 75	-1.15 ± 0.04	-2.22 ± 0.16	240 ± 35	0.2
8098	BAND	1.92 ± 0.15	2.48 ± 0.41	146 ± 10	-0.75 ± 0.14	-2.43 ± 0.13	111 ± 11	—
8101	COMP	10.44 ± 0.35	0.71 ± 0.02	306 ± 9	-0.64 ± 0.04	—	—	—

NOTE. —

* The hardness ratios are calculated via the BATSE catalog data, while the rest of spectral parameters are taken from K06.

^a Burst's trigger number as reported in the BATSE catalog.

^b HR_H represents Hardness Ratio as defined in §2.2. No attempt was made to keep the significant digits. Values are rounded off at the 2nd decimal places.

^c A represents the normalization factor of the assumed spectral model for each GRB in units of $0.01 \text{ ph s}^{-1} \text{ cm}^{-2}$.

^d All spectral peaks $E_{p,obs}$ and the corresponding 1σ uncertainties are in units of KeV.

^e α represents the low-energy photon index of the Band Model for GRBs best described by the Band model, and the low-energy photon index of SBPL Model for GRBs best described by SBPL, also the photon index of COMP model for GRBs best described by COMP.

^f β represents the high-energy photon index of the Band Model for GRBs best described by the Band model, and the low-energy photon index of SBPL Model for GRBs best described by SBPL.

^g E_{break} represents the break-energy of the Band Model for GRBs best described by the Band model, and the break-energy of SBPL Model for GRBs best described by SBPL. All reported break-energies and the corresponding 1σ uncertainties are in units of KeV.

^h Λ represents the break scale of SBPL Model for GRBs best described by SBPL.

Table 4: $E_{p,obs}$ estimates for 2130 GRBs in the BATSE catalog.*

Trigger ^a	HR_H ^b	Mean[$E_{p,obs}$] ^c	Mean[$E_{p,obs}$] ^d	Mode[$E_{p,obs}$] ^e	Mode[$E_{p,obs}$] ^f	Mode[$E_{p,obs}$] ^g	Mean[$E_{p,obs}$] ^h
(1)	Hardness (2)	OLS(Y X) (3)	OLS bisector (4)	Band (5)	COMP(CPL) (6)	SBPL (7)	Expected (8)
105*	1.41 ± 0.12	—	—	81^{+49}_{-39}	104^{+80}_{-34}	124^{+49}_{-60}	101^{+58}_{-48}
107	1.22^{\dagger}	$98.78^{+0.10}_{-0.10}$	$83.01^{+0.10}_{-0.10}$	73^{+43}_{-36}	94^{+68}_{-32}	116^{+45}_{-58}	91^{+53}_{-44}
108	64.20 ± 28.70	$1242.15^{+3.86}_{-3.85}$	$1595.74^{+5.92}_{-5.90}$	949^{+1573}_{-298}	1280^{+2725}_{-463}	795^{+1152}_{-242}	1297^{+1730}_{-633}
109*	4.02 ± 0.08	—	—	174^{+134}_{-72}	212^{+262}_{-66}	212^{+120}_{-80}	218^{+152}_{-92}
110	2.37 ± 0.80	$150.98^{+0.05}_{-0.05}$	$136.22^{+0.06}_{-0.06}$	119^{+78}_{-54}	147^{+145}_{-47}	161^{+74}_{-70}	147^{+90}_{-65}
111	0.68 ± 0.15	$67.68^{+0.12}_{-0.12}$	$53.38^{+0.12}_{-0.12}$	47^{+28}_{-24}	66^{+36}_{-23}	87^{+34}_{-48}	61^{+39}_{-32}
114	0.53^{\dagger}	$57.99^{+0.13}_{-0.13}$	$44.57^{+0.13}_{-0.12}$	40^{+25}_{-21}	57^{+28}_{-20}	77^{+32}_{-45}	53^{+36}_{-29}
121	2.35 ± 0.22	$150.16^{+0.06}_{-0.06}$	$135.36^{+0.06}_{-0.06}$	118^{+78}_{-53}	146^{+144}_{-47}	161^{+73}_{-70}	146^{+90}_{-65}
130*	3.80 ± 0.10	—	—	167^{+126}_{-70}	204^{+246}_{-64}	206^{+114}_{-79}	209^{+143}_{-88}
133	2.86 ± 0.57	$170.23^{+0.04}_{-0.04}$	$156.72^{+0.05}_{-0.05}$	137^{+94}_{-60}	167^{+179}_{-53}	178^{+88}_{-73}	169^{+108}_{-73}
138	4.55 ± 2.70	$229.01^{+0.03}_{-0.03}$	$221.58^{+0.04}_{-0.04}$	190^{+152}_{-77}	232^{+299}_{-72}	225^{+136}_{-83}	239^{+172}_{-100}
142	3.29 ± 0.11	$186.17^{+0.04}_{-0.04}$	$173.98^{+0.04}_{-0.04}$	151^{+109}_{-65}	184^{+210}_{-58}	191^{+100}_{-76}	188^{+124}_{-80}
143*	20.90 ± 0.13	—	—	512^{+685}_{-162}	661^{+1292}_{-214}	481^{+540}_{-134}	688^{+747}_{-303}
148	0.65 ± 0.17	$65.88^{+0.13}_{-0.13}$	$51.72^{+0.12}_{-0.12}$	46^{+28}_{-24}	64^{+35}_{-23}	85^{+33}_{-48}	60^{+38}_{-32}
160	2.58 ± 0.18	$159.39^{+0.05}_{-0.05}$	$145.13^{+0.05}_{-0.05}$	127^{+85}_{-56}	156^{+160}_{-49}	169^{+80}_{-71}	157^{+98}_{-69}
171	1.09 ± 0.29	$91.92^{+0.10}_{-0.10}$	$76.32^{+0.10}_{-0.10}$	67^{+39}_{-39}	88^{+60}_{-30}	109^{+42}_{-42}	84^{+49}_{-49}
179	1.09 ± 0.26	$91.92^{+0.10}_{-0.10}$	$76.32^{+0.10}_{-0.10}$	67^{+39}_{-33}	88^{+60}_{-30}	109^{+42}_{-56}	84^{+49}_{-41}
185	1.98^{\dagger}	$134.60^{+0.07}_{-0.07}$	$119.13^{+0.07}_{-0.07}$	105^{+66}_{-48}	130^{+118}_{-42}	147^{+64}_{-66}	129^{+77}_{-58}
204	29.00 ± 5.46	$747.65^{+1.17}_{-1.17}$	$882.11^{+1.64}_{-1.63}$	619^{+901}_{-191}	812^{+1658}_{-271}	560^{+694}_{-156}	840^{+976}_{-382}
206	14.70 ± 5.18	$484.40^{+0.34}_{-0.34}$	$531.40^{+0.43}_{-0.43}$	413^{+498}_{-137}	524^{+960}_{-166}	406^{+404}_{-116}	549^{+548}_{-234}
207	31.20 ± 11.90	$783.41^{+1.32}_{-1.32}$	$931.56^{+1.86}_{-1.86}$	645^{+955}_{-199}	849^{+1747}_{-285}	579^{+731}_{-162}	877^{+1033}_{-402}
211	0.99 ± 0.57	$86.39^{+0.11}_{-0.11}$	$70.98^{+0.11}_{-0.11}$	63^{+37}_{-31}	83^{+54}_{-28}	104^{+40}_{-54}	79^{+46}_{-39}
214	0.49 ± 0.37	$55.09^{+0.13}_{-0.13}$	$41.97^{+0.13}_{-0.13}$	37^{+20}_{-20}	55^{+26}_{-20}	75^{+31}_{-28}	50^{+35}_{-28}
218	10.20 ± 3.35	$383.54^{+0.15}_{-0.15}$	$404.61^{+0.18}_{-0.18}$	328^{+350}_{-115}	409^{+686}_{-127}	339^{+292}_{-103}	428^{+388}_{-178}
219*	3.49 ± 0.11	—	—	158^{+116}_{-67}	192^{+224}_{-60}	197^{+105}_{-77}	196^{+132}_{-83}
222	2.92 ± 0.29	$172.51^{+0.04}_{-0.04}$	$159.17^{+0.05}_{-0.05}$	139^{+96}_{-61}	170^{+183}_{-54}	180^{+89}_{-74}	172^{+110}_{-74}
223	1.44^{\dagger}	$109.82^{+0.09}_{-0.09}$	$93.94^{+0.09}_{-0.09}$	83^{+49}_{-40}	105^{+82}_{-35}	125^{+50}_{-61}	102^{+59}_{-48}
226*	6.34 ± 0.25	—	—	239^{+215}_{-91}	293^{+426}_{-91}	267^{+187}_{-90}	305^{+242}_{-126}
228	0.87 ± 0.63	$79.60^{+0.11}_{-0.11}$	$64.51^{+0.11}_{-0.11}$	57^{+33}_{-29}	76^{+47}_{-26}	98^{+37}_{-37}	72^{+43}_{-37}
229	7.70 ± 4.68	$320.49^{+0.08}_{-0.08}$	$328.06^{+0.09}_{-0.09}$	272^{+263}_{-100}	336^{+520}_{-104}	294^{+224}_{-95}	351^{+294}_{-145}
235	7.06 ± 1.09	$303.21^{+0.06}_{-0.06}$	$307.50^{+0.07}_{-0.07}$	257^{+241}_{-96}	316^{+476}_{-98}	282^{+207}_{-93}	330^{+270}_{-136}
237	5.07 ± 2.07	$245.40^{+0.04}_{-0.04}$	$240.21^{+0.04}_{-0.04}$	205^{+170}_{-81}	250^{+336}_{-78}	238^{+151}_{-85}	259^{+192}_{-107}
249*	7.09 ± 0.04	—	—	258^{+242}_{-96}	317^{+478}_{-98}	282^{+208}_{-93}	331^{+271}_{-136}
254	45.40^{\dagger}	$995.52^{+2.36}_{-2.35}$	$1232.31^{+3.47}_{-3.46}$	792^{+1259}_{-244}	1058^{+2236}_{-369}	685^{+940}_{-198}	1083^{+1364}_{-514}
257	16.60 ± 0.50	$523.51^{+0.43}_{-0.43}$	$581.84^{+0.56}_{-0.56}$	445^{+558}_{-145}	568^{+1067}_{-181}	430^{+447}_{-122}	594^{+611}_{-256}
269	3.64 ± 0.85	$198.59^{+0.04}_{-0.04}$	$187.61^{+0.04}_{-0.04}$	162^{+121}_{-68}	198^{+234}_{-62}	201^{+110}_{-78}	202^{+137}_{-86}
288	7.69 ± 2.65	$320.22^{+0.08}_{-0.08}$	$327.74^{+0.09}_{-0.09}$	272^{+263}_{-100}	336^{+519}_{-104}	294^{+224}_{-95}	351^{+294}_{-145}
289	22.30 ± 17.50	$632.15^{+0.75}_{-0.75}$	$725.14^{+1.01}_{-1.01}$	532^{+725}_{-167}	689^{+1360}_{-224}	495^{+569}_{-138}	717^{+789}_{-317}
297	21.30 ± 3.07	$613.89^{+0.69}_{-0.69}$	$700.74^{+0.92}_{-0.92}$	517^{+697}_{-164}	669^{+1312}_{-217}	485^{+549}_{-135}	697^{+759}_{-307}
298*	15.40 ± 0.47	—	—	425^{+520}_{-140}	541^{+1000}_{-172}	415^{+420}_{-118}	566^{+572}_{-242}
332	1.87 ± 0.22	$129.77^{+0.07}_{-0.07}$	$114.15^{+0.07}_{-0.07}$	100^{+62}_{-47}	125^{+111}_{-40}	143^{+61}_{-65}	124^{+73}_{-56}
351*	3.72 ± 0.20	—	—	165^{+123}_{-69}	201^{+240}_{-78}	203^{+112}_{-54}	206^{+140}_{-87}
353	1.59^{\dagger}	$117.00^{+0.08}_{-0.08}$	$101.14^{+0.08}_{-0.08}$	89^{+54}_{-42}	112^{+92}_{-37}	132^{+54}_{-62}	110^{+64}_{-51}
373	18.40 ± 15.40	$559.10^{+0.53}_{-0.53}$	$628.27^{+0.69}_{-0.69}$	474^{+612}_{-152}	608^{+1164}_{-195}	452^{+487}_{-127}	635^{+669}_{-276}
394*	4.60 ± 0.10	—	—	192^{+154}_{-77}	233^{+303}_{-73}	227^{+137}_{-83}	241^{+174}_{-100}

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
398	2.86 ± 0.29	170.23 ^{+0.04} _{-0.04}	156.72 ^{+0.05} _{-0.05}	137 ⁺⁹⁴ ₋₆₀	167 ⁺¹⁷⁹ ₋₅₃	178 ⁺⁸⁸ ₋₇₃	169 ⁺¹⁰⁸ ₋₇₃
401	2.08 [†]	138.90 ^{+0.06} _{-0.06}	123.58 ^{+0.07} _{-0.07}	108 ⁺⁶⁹ ₋₅₀	134 ⁺¹²⁵ ₋₄₃	151 ⁺⁶⁶ ₋₆₇	134 ⁺⁸⁰ ₋₆₀
404	2.04 ± 0.30	137.19 ^{+0.06} _{-0.06}	121.81 ^{+0.07} _{-0.07}	107 ⁺⁶⁸ ₋₄₉	132 ⁺¹²² ₋₄₃	150 ⁺⁶⁵ ₋₆₇	132 ⁺⁷⁹ ₋₅₉
408	1.30 ± 0.23	102.87 ^{+0.09} _{-0.09}	87.04 ^{+0.10} _{-0.10}	77 ⁺⁴⁵ ₋₃₇	98 ⁺⁷³ ₋₃₃	119 ⁺⁴⁷ ₋₅₉	95 ⁺⁵⁵ ₋₄₆
414	1.20 ± 1.05	97.75 ^{+0.10} _{-0.10}	81.99 ^{+0.10} _{-0.10}	72 ⁺⁴² ₋₃₅	93 ⁺⁶⁷ ₋₃₁	115 ⁺⁴⁴ ₋₅₈	90 ⁺⁵² ₋₄₄
432	47.10 ± 8.80	1019.17 ^{+2.49} _{-2.48}	1266.57 ^{+3.68} _{-3.67}	808 ⁺¹²⁹¹ ₋₂₄₉	1080 ⁺²²⁸⁶ ₋₃₇₈	696 ⁺⁹⁶² ₋₂₀₂	1104 ⁺¹⁴⁰⁰ ₋₅₂₆
444*	2.36 ± 0.24	—	—	119 ⁺⁷⁸ ₋₅₄	146 ⁺¹⁴⁴ ₋₄₇	161 ⁺⁷⁴ ₋₇₀	147 ⁺⁹⁰ ₋₆₅
451*	1.91 ± 0.07	—	—	102 ⁺⁶⁴ ₋₄₇	127 ⁺¹¹³ ₋₄₁	145 ⁺⁶² ₋₆₆	126 ⁺⁷⁴ ₋₅₇
465	1.58 [†]	116.53 ^{+0.08} _{-0.08}	100.67 ^{+0.08} _{-0.08}	89 ⁺⁵⁴ ₋₄₂	112 ⁺⁹² ₋₃₇	131 ⁺⁵³ ₋₆₂	109 ⁺⁶⁴ ₋₅₁
467	8.14 ± 0.39	332.07 ^{+0.09} _{-0.09}	341.94 ^{+0.10} _{-0.10}	283 ⁺²⁷⁸ ₋₁₀₃	349 ⁺⁵⁵⁰ ₋₉₆	303 ⁺²³⁷ ₋₁₅₁	365 ⁺³¹¹ ₋₁₅₁
469	9.02 ± 0.42	354.57 ^{+0.11} _{-0.11}	369.16 ^{+0.13} _{-0.13}	302 ⁺³⁰⁹ ₋₁₀₈	375 ⁺⁶⁰⁹ ₋₁₁₇	319 ⁺²⁶⁰ ₋₉₉	393 ⁺³⁴⁴ ₋₁₆₃
472	0.99 ± 0.94	86.28 ^{+0.11} _{-0.11}	70.87 ^{+0.11} _{-0.11}	62 ⁺³⁷ ₋₃₁	83 ⁺⁵⁴ ₋₂₈	104 ⁺⁴⁰ ₋₅₄	79 ⁺⁴⁶ ₋₃₉
473	0.76 ± 0.55	72.83 ^{+0.12} _{-0.12}	58.15 ^{+0.12} _{-0.12}	51 ⁺³⁰ ₋₂₆	70 ⁺⁴¹ ₋₂₄	91 ⁺³⁵ ₋₅₀	66 ⁺⁴⁰ ₋₃₄
474	114.00 ± 9.60	1792.55 ^{+8.18} _{-8.15}	2448.87 ^{+13.41} _{-13.34}	1260 ⁺²¹²⁰ ₋₄₂₁	1706 ⁺³⁵⁸⁰ ₋₆₅₆	1003 ⁺¹⁵¹⁵ ₋₃₄₀	1704 ⁺²⁴⁸⁸ ₋₈₅₇
480	40.40 ± 5.68	924.01 ^{+1.98} _{-1.98}	1129.59 ^{+2.88} _{-2.87}	744 ⁺¹¹⁵⁹ ₋₂₂₈	990 ⁺²⁰⁷⁸ ₋₃₄₁	650 ⁺⁸⁷² ₋₁₈₅	1016 ⁺¹²⁵⁴ ₋₄₇₇
486	2.78 ± 2.05	167.18 ^{+0.05} _{-0.05}	153.44 ^{+0.05} _{-0.05}	134 ⁺⁹² ₋₅₂	164 ⁺¹⁷⁴ ₋₅₂	175 ⁺⁸⁵ ₋₇₃	166 ⁺¹⁰⁵ ₋₇₂
491	258.00 ± 129.00	3020.40 ^{+21.58} _{-21.43}	4503.48 ^{+38.76} _{-38.43}	1836 ⁺²⁷⁸⁶ ₋₆₈₃	2439 ⁺⁴⁹³⁴ ₋₁₀₀₅	1356 ⁺¹⁹⁹¹ ₋₅₂₂	2406 ⁺⁴⁰⁵² ₋₁₁₉₉
493	0.92 ± 0.89	82.60 ^{+0.11} _{-0.11}	67.36 ^{+0.11} _{-0.11}	59 ⁺³⁵ ₋₃₀	79 ⁺⁵⁰ ₋₂₇	101 ⁺³⁸ ₋₃₈	75 ⁺⁴⁴ ₋₃₈
501	1.25 ± 0.37	100.33 ^{+0.09} _{-0.09}	84.53 ^{+0.10} _{-0.10}	74 ⁺⁴⁴ ₋₃₆	96 ⁺⁷⁰ ₋₃₂	117 ⁺⁴⁵ ₋₄₅	93 ⁺⁵³ ₋₄₅
503	27.00 ± 1.75	714.29 ^{+1.04} _{-1.04}	836.33 ^{+1.44} _{-1.44}	594 ⁺⁸⁵¹ ₋₁₈₄	777 ⁺¹⁵⁷⁴ ₋₂₅₇	542 ⁺⁶⁵⁸ ₋₁₅₀	805 ⁺⁹²² ₋₃₆₄
508	44.10 ± 40.60	977.21 ^{+2.26} _{-2.25}	1205.89 ^{+3.31} _{-3.30}	780 ⁺¹²³⁴ ₋₂₄₀	1041 ⁺²¹⁹⁶ ₋₃₆₂	676 ⁺⁹²³ ₋₁₉₅	1066 ⁺¹³³⁶ ₋₅₀₅
512	40.90 ± 13.20	931.30 ^{+2.02} _{-2.01}	1140.00 ^{+2.93} _{-2.93}	749 ⁺¹¹⁷⁰ ₋₂₃₀	997 ⁺²⁰⁹⁵ ₋₃₄₄	654 ⁺⁸⁷⁹ ₋₁₈₇	1023 ⁺¹²⁶⁶ ₋₄₈₁
516	0.71 ± 0.61	69.72 ^{+0.12} _{-0.12}	55.26 ^{+0.12} _{-0.12}	49 ⁺²⁹ ₋₂₅	68 ⁺³⁴ ₋₂₄	89 ⁺³⁴ ₋₄₉	63 ⁺³⁹ ₋₃₃
526	1.97 ± 1.70	134.16 ^{+0.07} _{-0.07}	118.68 ^{+0.07} _{-0.07}	104 ⁺⁶⁶ ₋₄₈	129 ⁺¹¹⁸ ₋₄₂	147 ⁺⁶³ ₋₆₆	128 ⁺⁷⁶ ₋₅₈
537	16.60 ± 3.21	523.51 ^{+0.43} _{-0.43}	581.84 ^{+0.56} _{-0.56}	445 ⁺⁵⁵⁸ ₋₁₄₅	568 ⁺¹⁰⁶⁷ ₋₁₈₁	430 ⁺⁴⁴⁷ ₋₁₂₂	594 ⁺⁶¹¹ ₋₂₅₆
540	0.43 ± 0.33	51.12 ^{+0.14} _{-0.14}	38.47 ^{+0.13} _{-0.13}	34 ⁺²² ₋₁₈	52 ⁺²³ ₋₁₉	71 ⁺³⁰ ₋₄₂	47 ⁺³⁴ ₋₂₆
543*	2.90 ± 0.10	—	—	138 ⁺⁹⁶ ₋₆₀	169 ⁺¹⁸² ₋₅₃	179 ⁺⁸⁹ ₋₇₄	171 ⁺¹⁰⁹ ₋₇₄
547	12.70 ± 2.12	441.20 ^{+0.25} _{-0.25}	476.48 ^{+0.31} _{-0.31}	377 ⁺⁴³³ ₋₁₂₈	475 ⁺⁸⁴² ₋₁₄₉	378 ⁺³⁵⁵ ₋₁₁₁	497 ⁺⁴⁷⁹ ₋₂₁₀
548	1.83 ± 0.15	127.99 ^{+0.07} _{-0.07}	112.33 ^{+0.08} _{-0.08}	99 ⁺⁶¹ ₋₄₀	123 ⁺¹⁰⁸ ₋₆₈	142 ⁺⁶⁰ ₋₅₆	122 ⁺⁷² ₋₅₆
549	6.33 ± 2.68	282.79 ^{+0.05} _{-0.05}	283.46 ^{+0.05} _{-0.05}	239 ⁺²¹⁵ ₋₉₁	293 ⁺⁴²⁵ ₋₉₁	267 ⁺¹⁸⁶ ₋₉₀	305 ⁺²⁴¹ ₋₁₂₆
550	0.90 [†]	81.45 ^{+0.11} _{-0.11}	66.27 ^{+0.11} _{-0.11}	58 ⁺³⁴ ₋₂₉	78 ⁺⁴⁹ ₋₂₇	100 ⁺³⁸ ₋₃₈	74 ⁺⁴⁴ ₋₃₈
551	17.00 ± 2.28	531.54 ^{+0.45} _{-0.45}	592.26 ^{+0.59} _{-0.58}	452 ⁺⁵⁷⁰ ₋₁₄₇	577 ⁺¹⁰⁸⁹ ₋₁₈₄	435 ⁺⁴⁵⁷ ₋₁₂₃	604 ⁺⁶²⁴ ₋₂₆₁
555	25.90 ± 11.70	695.56 ^{+0.97} _{-0.97}	810.78 ^{+1.33} _{-1.33}	580 ⁺⁸²² ₋₁₈₀	757 ⁺¹⁵²⁶ ₋₂₅₀	531 ⁺⁶³⁸ ₋₁₄₈	786 ⁺⁸⁹² ₋₃₅₃
559	34.20 ± 10.10	830.72 ^{+1.53} _{-1.53}	997.59 ^{+2.18} _{-2.17}	679 ⁺¹⁰²⁵ ₋₂₀₉	897 ⁺¹⁸⁶² ₋₃₀₄	604 ⁺⁷⁸⁰ ₋₄₂₇	925 ⁺¹¹⁰⁸ ₋₄₂₇
563	2.26 ± 0.23	146.46 ^{+0.06} _{-0.06}	131.48 ^{+0.06} _{-0.06}	115 ⁺⁷⁵ ₋₅₂	142 ⁺¹³⁷ ₋₄₅	158 ⁺⁷¹ ₋₆₉	142 ⁺⁸⁶ ₋₆₃
568	57.60 ± 14.70	1158.99 ^{+3.32} _{-3.31}	1471.70 ^{+5.03} _{-5.01}	898 ⁺¹⁴⁷² ₋₂₇₉	1208 ⁺²⁵⁶⁹ ₋₄₃₂	759 ⁺¹⁰⁸⁴ ₋₂₂₇	1227 ⁺¹⁶⁰⁹ ₋₅₉₄
575	6.73 ± 1.37	294.07 ^{+0.06} _{-0.06}	296.71 ^{+0.06} _{-0.06}	249 ⁺²²⁹ ₋₉₄	306 ⁺⁴⁵³ ₋₉₅	275 ⁺¹⁹⁸ ₋₉₂	318 ⁺²⁵⁷ ₋₁₃₁
577	1.92 ± 0.38	131.98 ^{+0.07} _{-0.07}	116.42 ^{+0.07} _{-0.07}	102 ⁺⁶⁴ ₋₄₇	127 ⁺¹¹⁴ ₋₄₁	145 ⁺⁶² ₋₆₆	126 ⁺⁷⁵ ₋₅₇
591	2.23 ± 0.77	145.22 ^{+0.06} _{-0.06}	130.17 ^{+0.06} _{-0.06}	114 ⁺⁷⁴ ₋₅₂	141 ⁺¹³⁵ ₋₄₅	157 ⁺⁷⁰ ₋₆₉	141 ⁺⁸⁵ ₋₆₃
593	0.95 ± 0.35	83.97 ^{+0.11} _{-0.11}	68.67 ^{+0.11} _{-0.11}	61 ⁺³⁵ ₋₃₀	80 ⁺⁵² ₋₂₇	102 ⁺³⁹ ₋₅₄	77 ⁺⁴⁵ ₋₃₈
594	5.60 ± 0.58	261.50 ^{+0.04} _{-0.04}	258.70 ^{+0.04} _{-0.04}	220 ⁺¹⁸⁹ ₋₈₆	268 ⁺³⁷⁴ ₋₈₃	251 ⁺¹⁶⁶ ₋₈₇	278 ⁺²¹³ ₋₁₁₅
603	5.24 ± 1.24	250.63 ^{+0.04} _{-0.04}	246.19 ^{+0.04} _{-0.04}	210 ⁺¹⁷⁶ ₋₈₃	256 ⁺³⁴⁹ ₋₇₉	242 ⁺¹⁵⁵ ₋₈₆	265 ⁺¹⁹⁹ ₋₁₁₀
606	2.64 ± 0.48	161.75 ^{+0.05} _{-0.05}	147.64 ^{+0.05} _{-0.05}	129 ⁺⁸⁷ ₋₅₇	158 ⁺¹⁶⁴ ₋₅₀	171 ⁺⁸¹ ₋₇₂	159 ⁺¹⁰⁰ ₋₇₀
612	3.34 ± 0.32	187.97 ^{+0.04} _{-0.04}	175.95 ^{+0.04} _{-0.04}	153 ⁺¹¹⁰ ₋₆₅	186 ⁺²¹³ ₋₅₉	192 ⁺¹⁰¹ ₋₇₆	190 ⁺¹²⁶ ₋₈₁
630	1.12 ± 0.63	93.53 ^{+0.10} _{-0.10}	77.88 ^{+0.10} _{-0.10}	69 ⁺⁴⁰ ₋₃₄	89 ⁺⁶² ₋₃₀	111 ⁺⁴² ₋₅₆	86 ⁺⁵⁰ ₋₄₂
640	13.80 ± 13.20	465.24 ^{+0.30} _{-0.30}	506.94 ^{+0.37} _{-0.37}	397 ⁺⁴⁶⁹ ₋₁₃₃	502 ⁺⁹⁰⁸ ₋₁₅₉	393 ⁺³⁸² ₋₁₁₄	526 ⁺⁵¹⁷ ₋₂₂₃
647*	2.63 ± 0.06	—	—	129 ⁺⁸⁷ ₋₅₇	158 ⁺¹⁶³ ₋₅₀	170 ⁺⁸¹ ₋₇₂	159 ⁺¹⁰⁰ ₋₆₉
658	2.17 ± 0.58	142.71 ^{+0.06} _{-0.06}	127.55 ^{+0.07} _{-0.07}	112 ⁺⁷² ₋₅₁	138 ⁺¹³¹ ₋₄₄	154 ⁺⁶⁹ ₋₆₈	138 ⁺⁸³ ₋₆₂
659	0.57 ± 0.07	60.89 ^{+0.13} _{-0.13}	47.18 ^{+0.12} _{-0.12}	42 ⁺²⁶ ₋₂₂	60 ⁺³⁰ ₋₂₁	80 ⁺³² ₋₄₆	55 ⁺³⁷ ₋₃₀

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
660	6.52 ± 0.36	288.18 ^{+0.05} _{-0.05}	289.78 ^{+0.06} _{-0.06}	244 ⁺²²² ₋₉₃	299 ⁺⁴³⁹ ₋₉₂	271 ⁺¹⁹² ₋₉₁	311 ⁺²⁴⁹ ₋₁₂₈
666	1.79 ± 1.25	126.20 ^{+0.07} _{-0.07}	110.49 ^{+0.08} _{-0.08}	97 ⁺⁶⁰ ₋₄₅	121 ⁺¹⁰⁵ ₋₃₉	140 ⁺⁵⁹ ₋₆₅	120 ⁺⁷⁰ ₋₅₅
673	1.08 ± 0.96	91.38 ^{+0.10} _{-0.10}	75.80 ^{+0.10} _{-0.10}	67 ⁺³⁹ ₋₃₃	87 ⁺⁶⁰ ₋₂₉	109 ⁺⁴² ₋₅₆	84 ⁺⁴⁹ ₋₄₁
676*	9.22 ± 0.18	—	—	307 ⁺³¹⁶ ₋₁₁₀	381 ⁺⁶²² ₋₁₁₈	322 ⁺²⁶⁶ ₋₁₀₀	399 ⁺³⁵² ₋₁₆₅
677	104.00 ± 15.90	1690.45 ^{+7.29} _{-7.26}	2286.79 ^{+11.82} _{-11.76}	1206 ⁺²⁰³⁴ ₋₃₉₈	1633 ⁺³⁴⁴¹ ₋₆₂₂	968 ⁺¹⁴⁵⁸ ₋₃₂₂	1635 ⁺²³⁵² ₋₈₂₀
678	42.60 ± 0.39	955.85 ^{+2.15} _{-2.14}	1175.16 ^{+3.13} _{-3.13}	766 ⁺¹²⁰⁴ ₋₂₃₅	1020 ⁺²¹⁴⁹ ₋₃₅₃	666 ⁺⁹⁰³ ₋₁₉₁	1046 ⁺¹³⁰⁴ ₋₄₉₄
680	0.79 ± 0.27	74.78 ^{+0.12} _{-0.12}	59.97 ^{+0.12} _{-0.12}	53 ⁺³¹ ₋₂₇	72 ⁺⁴² ₋₂₅	93 ⁺³⁶ ₋₅₁	68 ⁺⁴¹ ₋₃₅
685	0.82 ± 0.50	76.52 ^{+0.12} _{-0.12}	61.61 ^{+0.12} _{-0.12}	54 ⁺³² ₋₂₈	74 ⁺⁴⁴ ₋₂₅	95 ⁺⁴² ₋₅₁	69 ⁺⁴² ₋₃₆
686	4.75 ± 1.51	235.39 ^{+0.03} _{-0.03}	228.81 ^{+0.04} _{-0.04}	196 ⁺¹⁵⁹ ₋₇₉	239 ⁺³¹⁴ ₋₈₄	230 ⁺¹⁴¹ ₋₁₀₃	247 ⁺¹⁸⁰ ₋₁₀₃
690	1.52 [†]	113.68 ^{+0.08} _{-0.08}	97.80 ^{+0.09} _{-0.09}	86 ⁺⁵² ₋₄₁	109 ⁺⁵⁸ ₋₃₆	129 ⁺⁵² ₋₆₂	106 ⁺⁶² ₋₅₀
692	1.16 ± 0.38	95.65 ^{+0.10} _{-0.10}	79.95 ^{+0.10} _{-0.10}	70 ⁺⁴¹ ₋₃₅	91 ⁺⁶⁵ ₋₃₁	113 ⁺⁴³ ₋₅₇	88 ⁺⁵¹ ₋₄₃
704	4.36 ± 0.85	222.86 ^{+0.03} _{-0.03}	214.64 ^{+0.04} _{-0.04}	184 ⁺¹⁴⁶ ₋₇₅	225 ⁺²⁸⁶ ₋₇₀	221 ⁺¹³⁰ ₋₈₂	232 ⁺¹⁶⁵ ₋₉₇
717	0.77 [†]	73.56 ^{+0.12} _{-0.12}	58.83 ^{+0.12} _{-0.12}	52 ⁺³¹ ₋₂₆	71 ⁺⁴¹ ₋₂₅	92 ⁺³⁵ ₋₅₀	67 ⁺⁴¹ ₋₃₅
727	2.95 ± 0.81	173.64 ^{+0.04} _{-0.04}	160.38 ^{+0.05} _{-0.05}	140 ⁺⁹⁷ ₋₆₁	171 ⁺¹⁸⁵ ₋₅₄	181 ⁺⁹⁰ ₋₇₄	173 ⁺¹¹¹ ₋₇₅
729	84.60 ± 36.00	1481.58 ^{+5.59} _{-5.57}	1960.41 ^{+8.85} _{-8.81}	1091 ⁺¹⁸³⁶ ₋₃₅₁	1476 ⁺³¹³¹ ₋₅₅₀	891 ⁺¹³²⁶ ₋₂₈₅	1485 ⁺²⁰⁶⁸ ₋₇₃₈
734	58.50 [†]	1170.52 ^{+3.39} _{-3.38}	1488.82 ^{+5.15} _{-5.13}	905 ⁺¹⁴⁸⁶ ₋₂₈₂	1218 ⁺²⁵⁹¹ ₋₄₃₆	764 ⁺¹⁰⁹⁴ ₋₂₂₉	1237 ⁺¹⁶²⁶ ₋₆₀₀
741	7.49 ± 4.88	314.88 ^{+0.07} _{-0.07}	321.36 ^{+0.08} _{-0.08}	267 ⁺²⁵⁶ ₋₉₉	329 ⁺⁵⁰⁶ ₋₁₀₂	290 ⁺²¹⁹ ₋₉₄	344 ⁺²⁸⁶ ₋₁₄₂
752	2.04 ± 1.12	137.19 ^{+0.06} _{-0.06}	121.81 ^{+0.07} _{-0.07}	107 ⁺⁶⁸ ₋₄₉	132 ⁺¹²² ₋₄₃	150 ⁺⁶⁵ ₋₆₇	132 ⁺⁷⁹ ₋₅₉
753	1.28 ± 0.68	101.86 ^{+0.09} _{-0.09}	86.04 ^{+0.10} _{-0.10}	76 ⁺⁴⁵ ₋₃₇	97 ⁺⁷² ₋₃₂	118 ⁺⁴⁶ ₋₄₅	94 ⁺⁵⁴ ₋₄₅
755	5.26 ± 2.84	251.24 ^{+0.04} _{-0.04}	246.89 ^{+0.04} _{-0.04}	210 ⁺¹⁷⁷ ₋₈₃	257 ⁺³⁵⁰ ₋₈₀	243 ⁺¹⁵⁶ ₋₁₁₀	266 ⁺²⁰⁰ ₋₁₁₀
761*	4.30 ± 0.17	—	—	183 ⁺¹⁴⁴ ₋₇₅	223 ⁺²⁸² ₋₆₉	219 ⁺¹²⁸ ₋₈₁	229 ⁺¹⁶³ ₋₉₆
764	1.09 ± 0.30	91.92 ^{+0.10} _{-0.10}	76.32 ^{+0.10} _{-0.10}	67 ⁺³⁹ ₋₃₃	88 ⁺⁶⁰ ₋₃₀	109 ⁺⁴² ₋₅₆	84 ⁺⁴⁹ ₋₄₁
773	1.09 ± 0.22	91.92 ^{+0.10} _{-0.10}	76.32 ^{+0.10} _{-0.10}	67 ⁺³⁹ ₋₃₃	88 ⁺⁶⁰ ₋₃₀	109 ⁺⁴² ₋₅₆	84 ⁺⁴⁹ ₋₄₁
788	2.26 ± 1.14	146.46 ^{+0.06} _{-0.06}	131.48 ^{+0.06} _{-0.06}	115 ⁺⁷⁵ ₋₅₂	142 ⁺¹³⁷ ₋₄₅	158 ⁺⁷¹ ₋₆₉	142 ⁺⁸⁶ ₋₆₃
795	2.06 ± 0.30	138.04 ^{+0.06} _{-0.06}	122.70 ^{+0.07} _{-0.07}	108 ⁺⁶⁸ ₋₄₉	133 ⁺¹²⁴ ₋₄₃	150 ⁺⁶⁶ ₋₆₇	133 ⁺⁷⁹ ₋₆₀
799	1.42 [†]	108.84 ^{+0.09} _{-0.09}	92.96 ^{+0.09} _{-0.09}	82 ⁺⁴⁹ ₋₃₉	104 ⁺⁸¹ ₋₃₄	125 ⁺⁴⁹ ₋₆₀	101 ⁺⁵⁹ ₋₄₈
803	3.31 ± 0.85	186.89 ^{+0.04} _{-0.04}	174.77 ^{+0.04} _{-0.04}	152 ⁺¹⁰⁹ ₋₆₅	185 ⁺²¹¹ ₋₅₈	192 ⁺¹⁰⁰ ₋₇₆	189 ⁺¹²⁵ ₋₈₀
809	5.62 ± 0.82	262.09 ^{+0.04} _{-0.04}	259.39 ^{+0.04} _{-0.04}	220 ⁺¹⁹⁰ ₋₈₆	269 ⁺³⁷⁵ ₋₈₃	251 ⁺¹⁶⁶ ₋₈₇	279 ⁺²¹⁴ ₋₁₁₅
815	0.71 ± 0.45	69.84 ^{+0.12} _{-0.12}	55.38 ^{+0.12} _{-0.12}	49 ⁺²⁹ ₋₂₅	68 ⁺³⁸ ₋₂₄	89 ⁺³⁴ ₋₄₉	63 ⁺³⁹ ₋₃₃
816	0.26 [†]	36.89 ^{+0.14} _{-0.14}	26.28 ^{+0.13} _{-0.13}	24 ⁺¹³ ₋₁₃	40 ⁺²⁴ ₋₁₅	57 ⁺³⁶ ₋₂₁	36 ⁺³³ ₋₂₁
820	11.80 ± 2.17	420.96 ^{+0.21} _{-0.21}	451.06 ^{+0.26} _{-0.26}	360 ⁺⁴⁰⁴ ₋₁₂₃	452 ⁺⁷⁸⁷ ₋₁₄₂	364 ⁺³³³ ₋₁₀₈	473 ⁺⁴⁴⁷ ₋₁₉₉
824	0.60 ± 0.24	62.71 ^{+0.13} _{-0.13}	48.83 ^{+0.12} _{-0.12}	43 ⁺²⁶ ₋₂₂	61 ⁺³² ₋₂₂	82 ⁺³² ₋₄₇	57 ⁺³⁷ ₋₃₁
825	3.47 ± 0.75	192.61 ^{+0.04} _{-0.04}	181.03 ^{+0.04} _{-0.04}	157 ⁺¹¹⁵ ₋₆₇	191 ⁺²²² ₋₆₀	196 ⁺¹⁰⁵ ₋₇₇	195 ⁺¹³¹ ₋₈₃
829	1.08 ± 0.03	91.38 ^{+0.10} _{-0.10}	75.80 ^{+0.10} _{-0.10}	67 ⁺³⁹ ₋₃₃	87 ⁺⁶⁰ ₋₂₉	109 ⁺⁴² ₋₅₆	84 ⁺⁴⁹ ₋₄₁
830	22.70 ± 4.02	639.37 ^{+0.77} _{-0.77}	734.82 ^{+1.04} _{-1.04}	537 ⁺⁷³⁶ ₋₁₆₉	696 ⁺¹³⁷⁹ ₋₂₂₇	500 ⁺⁵⁷⁷ ₋₁₃₉	725 ⁺⁸⁰⁰ ₋₃₂₂
834	2.20 [†]	143.97 ^{+0.06} _{-0.06}	128.86 ^{+0.06} _{-0.06}	113 ⁺⁷³ ₋₅₁	139 ⁺¹³³ ₋₄₅	155 ⁺⁶⁹ ₋₆₈	139 ⁺⁸⁴ ₋₆₂
836	7.46 ± 7.21	314.07 ^{+0.07} _{-0.07}	320.40 ^{+0.08} _{-0.08}	267 ⁺²⁵⁵ ₋₉₉	329 ⁺⁵⁰⁴ ₋₁₀₂	290 ⁺²¹⁸ ₋₉₄	343 ⁺²⁸⁵ ₋₁₄₂
840	18.00 ± 2.71	551.30 ^{+0.50} _{-0.50}	618.06 ^{+0.66} _{-0.66}	468 ⁺⁶⁰⁰ ₋₁₅₁	600 ⁺¹¹⁴³ ₋₁₉₂	447 ⁺⁴⁷⁹ ₋₁₂₆	626 ⁺⁶⁵⁷ ₋₂₇₂
841	2.30 ± 0.19	148.11 ^{+0.06} _{-0.06}	133.21 ^{+0.06} _{-0.06}	117 ⁺⁷⁶ ₋₅₃	144 ⁺¹⁴⁰ ₋₄₆	159 ⁺⁷² ₋₆₉	144 ⁺⁸⁸ ₋₆₄
845	22.20 ± 12.00	630.34 ^{+0.74} _{-0.74}	722.71 ^{+1.00} _{-1.00}	530 ⁺⁷²² ₋₁₆₇	687 ⁺¹³⁵⁵ ₋₂₂₄	494 ⁺⁵⁶⁷ ₋₁₃₇	715 ⁺⁷⁸⁶ ₋₃₁₆
856	1.84 ± 1.69	128.44 ^{+0.07} _{-0.07}	112.78 ^{+0.08} _{-0.08}	99 ⁺⁶¹ ₋₄₆	124 ⁺¹⁰⁹ ₋₄₀	142 ⁺⁶⁰ ₋₆₅	122 ⁺⁷² ₋₅₆
867	18.40 ± 1.52	559.10 ^{+0.53} _{-0.53}	628.27 ^{+0.69} _{-0.69}	474 ⁺⁶¹² ₋₁₅₂	608 ⁺¹¹⁶⁴ ₋₁₉₅	452 ⁺⁴⁸⁷ ₋₁₂₇	635 ⁺⁶⁶⁹ ₋₂₇₆
869	6.16 ± 0.44	277.91 ^{+0.05} _{-0.05}	277.76 ^{+0.05} _{-0.05}	234 ⁺²⁰⁹ ₋₉₀	287 ⁺⁴¹³ ₋₈₉	263 ⁺¹⁸² ₋₈₉	299 ⁺²³⁵ ₋₁₂₃
871	2.58 ± 0.73	159.39 ^{+0.05} _{-0.05}	145.13 ^{+0.05} _{-0.05}	127 ⁺⁸⁵ ₋₅₆	156 ⁺¹⁶⁰ ₋₄₉	169 ⁺⁸⁰ ₋₇₁	157 ⁺⁹⁸ ₋₆₉
878	48.00 ± 29.10	1031.57 ^{+2.56} _{-2.55}	1284.57 ^{+3.79} _{-3.78}	816 ⁺¹³⁰⁷ ₋₂₅₁	1092 ⁺²³¹² ₋₃₈₃	702 ⁺⁹⁷³ ₋₂₀₄	1116 ⁺¹⁴¹⁹ ₋₅₃₂
906	12.30 ± 2.24	432.27 ^{+0.23} _{-0.23}	465.24 ^{+0.29} _{-0.29}	369 ⁺⁴²⁰ ₋₁₂₆	465 ⁺⁸¹⁸ ₋₁₄₆	372 ⁺³⁴⁵ ₋₁₀₉	487 ⁺⁴⁶⁵ ₋₂₀₅
907	1.67 ± 0.10	120.72 ^{+0.08} _{-0.08}	104.92 ^{+0.08} _{-0.08}	92 ⁺⁵⁶ ₋₄₄	116 ⁺⁹⁷ ₋₃₈	135 ⁺⁵⁶ ₋₆₃	114 ⁺⁶⁶ ₋₅₃
909	2.54 [†]	157.81 ^{+0.05} _{-0.05}	143.45 ^{+0.06} _{-0.06}	125 ⁺⁸⁴ ₋₅₆	154 ⁺¹⁵⁷ ₋₄₉	167 ⁺⁷⁹ ₋₇₁	155 ⁺⁹⁶ ₋₆₈
914	1.89 ± 0.34	130.65 ^{+0.07} _{-0.07}	115.06 ^{+0.07} _{-0.07}	101 ⁺⁶³ ₋₄₇	126 ⁺¹¹² ₋₄₁	144 ⁺⁶¹ ₋₆₆	125 ⁺⁷⁴ ₋₅₇

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
927	0.46 [†]	53.20 ^{+0.14} _{-0.13}	40.30 ^{+0.13} _{-0.13}	36 ⁺²³ ₋₁₉	53 ⁺²⁵ ₋₁₉	73 ⁺³¹ ₋₄₃	49 ⁺³⁵ ₋₂₇
929	39.30 [†]	907.86 ^{+1.90} _{-1.90}	1106.57 ^{+2.75} _{-2.74}	733 ⁺¹¹³⁶ ₋₂₂₅	974 ⁺²⁰⁴² ₋₃₃₄	643 ⁺⁸⁵⁷ ₋₁₈₃	1000 ⁺¹²²⁹ ₋₄₆₉
936	11.60 ± 2.40	416.39 ^{+0.20} _{-0.20}	445.35 ^{+0.25} _{-0.25}	356 ⁺³⁹⁷ ₋₁₂₂	446 ⁺⁷⁷⁵ ₋₁₄₀	361 ⁺³²⁸ ₋₁₀₇	468 ⁺⁴⁴⁰ ₋₁₉₆
938	0.87 ± 0.41	79.54 ^{+0.11} _{-0.11}	64.45 ^{+0.11} _{-0.11}	57 ⁺³³ ₋₂₉	76 ⁺⁴⁷ ₋₂₆	98 ⁺³⁷ ₋₅₂	72 ⁺⁴³ ₋₃₇
942	16.70 ± 6.64	525.52 ^{+0.44} _{-0.44}	584.45 ^{+0.56} _{-0.56}	447 ⁺⁵⁶¹ ₋₁₄₅	571 ⁺¹⁰⁷³ ₋₁₈₂	432 ⁺⁴⁵⁰ ₋₁₂₂	597 ⁺⁶¹⁵ ₋₂₅₇
946	6.17 ± 2.71	278.20 ^{+0.05} _{-0.05}	278.10 ^{+0.05} _{-0.05}	235 ⁺²⁰⁹ ₋₉₀	287 ⁺⁴¹⁴ ₋₈₉	263 ⁺¹⁸² ₋₈₉	299 ⁺²³⁵ ₋₁₂₃
973*	5.89 ± 0.13	—	—	227 ⁺¹⁹⁹ ₋₈₈	278 ⁺³⁹⁴ ₋₈₆	257 ⁺¹⁷⁴ ₋₈₈	289 ⁺²²⁴ ₋₁₁₉
974	16.10 ± 8.49	513.38 ^{+0.41} _{-0.41}	568.71 ^{+0.52} _{-0.52}	437 ⁺⁵⁴² ₋₁₄₃	557 ⁺¹⁰⁴⁰ ₋₁₇₇	424 ⁺⁴³⁶ ₋₁₂₀	583 ⁺⁵⁹⁵ ₋₂₅₀
981	0.77 [†]	73.87 ^{+0.12} _{-0.12}	59.12 ^{+0.12} _{-0.12}	52 ⁺³¹ ₋₂₇	71 ⁺⁴² ₋₂₅	92 ⁺³⁵ ₋₅₁	67 ⁺⁴¹ ₋₃₅
999*	8.42 ± 0.38	—	—	289 ⁺²⁸⁸ ₋₁₁₁	358 ⁺⁵⁶⁹ ₋₁₁₁	308 ⁺²⁴⁴ ₋₉₇	374 ⁺³²² ₋₁₅₅
1008	4.28 ± 0.08	220.24 ^{+0.03} _{-0.03}	211.70 ^{+0.04} _{-0.04}	182 ⁺¹⁴³ ₋₇₅	222 ⁺²⁸⁰ ₋₆₉	218 ⁺¹²⁸ ₋₈₁	228 ⁺¹⁶² ₋₉₅
1009	2.50 ± 0.34	156.22 ^{+0.05} _{-0.05}	141.76 ^{+0.06} _{-0.06}	124 ⁺⁸² ₋₅₅	152 ⁺¹⁵⁴ ₋₄₈	166 ⁺⁷⁸ ₋₇₁	153 ⁺⁹⁵ ₋₆₇
1025*	2.23 ± 0.13	—	—	114 ⁺⁷⁴ ₋₅₂	141 ⁺¹³⁵ ₋₄₅	157 ⁺⁷⁰ ₋₆₉	141 ⁺⁸⁵ ₋₆₃
1036	1.42 ± 0.21	108.84 ^{+0.09} _{-0.09}	92.96 ^{+0.09} _{-0.09}	82 ⁺⁴⁹ ₋₃₉	104 ⁺⁸¹ ₋₃₄	125 ⁺⁴⁹ ₋₆₀	101 ⁺⁵⁹ ₋₄₈
1039	0.81 ± 0.25	76.16 ^{+0.12} _{-0.12}	61.27 ^{+0.12} _{-0.12}	54 ⁺³² ₋₂₇	73 ⁺⁴⁴ ₋₂₅	95 ⁺³⁶ ₋₅₁	69 ⁺⁴² ₋₃₆
1042	0.55 ± 0.35	59.31 ^{+0.13} _{-0.13}	45.76 ^{+0.12} _{-0.12}	41 ⁺²⁵ ₋₂₁	59 ⁺²⁹ ₋₂₁	79 ⁺³² ₋₄₆	54 ⁺³⁶ ₋₂₉
1046	1.42 ± 0.29	108.84 ^{+0.09} _{-0.09}	92.96 ^{+0.09} _{-0.09}	82 ⁺⁴⁹ ₋₃₉	104 ⁺⁸¹ ₋₃₄	125 ⁺⁴⁹ ₋₆₀	101 ⁺⁵⁹ ₋₄₈
1051	3.73 [†]	201.71 ^{+0.03} _{-0.03}	191.06 ^{+0.04} _{-0.04}	165 ⁺¹²⁴ ₋₆₉	201 ⁺²⁴¹ ₋₆₃	204 ⁺¹¹² ₋₇₈	206 ⁺¹⁴¹ ₋₈₇
1071	2.22 ± 0.38	144.80 ^{+0.06} _{-0.06}	129.74 ^{+0.06} _{-0.06}	114 ⁺⁷³ ₋₄₅	140 ⁺¹³⁵ ₋₄₅	156 ⁺⁷⁰ ₋₆₈	140 ⁺⁸⁵ ₋₆₂
1073	5.12 ± 1.40	246.95 ^{+0.04} _{-0.04}	241.97 ^{+0.04} _{-0.04}	206 ⁺¹⁷² ₋₈₂	252 ⁺³⁴⁰ ₋₇₈	239 ⁺¹⁵² ₋₈₅	261 ⁺¹⁹⁴ ₋₁₀₈
1076	35.60 ± 5.46	852.29 ^{+1.63} _{-1.63}	1027.89 ^{+2.33} _{-2.33}	694 ⁺¹⁰⁵⁷ ₋₂₁₃	919 ⁺¹⁹¹³ ₋₃₁₂	615 ⁺⁸⁰² ₋₁₇₃	946 ⁺¹¹⁴² ₋₄₃₉
1085	2.27 ± 0.02	146.88 ^{+0.06} _{-0.06}	131.91 ^{+0.06} _{-0.06}	116 ⁺⁷⁵ ₋₅₂	142 ⁺¹³⁸ ₋₄₆	158 ⁺⁷¹ ₋₆₉	143 ⁺⁸⁷ ₋₆₃
1086	1.02 [†]	88.11 ^{+0.11} _{-0.11}	72.63 ^{+0.11} _{-0.11}	64 ⁺³⁷ ₋₂₉	84 ⁺⁵⁶ ₋₂₉	106 ⁺⁴⁰ ₋₅₅	81 ⁺⁴⁷ ₋₄₀
1087	2.41 ± 1.67	152.60 ^{+0.05} _{-0.05}	137.93 ^{+0.06} _{-0.06}	121 ⁺⁵⁴ ₋₅₄	148 ⁺¹⁴⁸ ₋₄₇	163 ⁺⁷⁰ ₋₇₀	149 ⁺⁹² ₋₆₆
1088	53.70 ± 4.87	1108.23 ^{+3.01} _{-3.00}	1396.72 ^{+4.52} _{-4.50}	866 ⁺¹⁴⁰⁸ ₋₂₆₈	1162 ⁺²⁴⁷⁰ ₋₄₁₂	737 ⁺¹⁰⁴¹ ₋₂₁₈	1184 ⁺¹⁵³⁴ ₋₅₇₀
1096	1.65 [†]	119.80 ^{+0.08} _{-0.08}	103.98 ^{+0.08} _{-0.08}	91 ⁺⁵⁶ ₋₄₃	115 ⁺⁹⁶ ₋₃₈	134 ⁺⁵⁵ ₋₆₃	113 ⁺⁶⁶ ₋₅₂
1097	6.43 ± 2.50	285.63 ^{+0.05} _{-0.05}	286.79 ^{+0.06} _{-0.06}	241 ⁺²¹⁸ ₋₉₂	296 ⁺⁴³² ₋₉₂	269 ⁺¹⁸⁹ ₋₉₀	308 ⁺²⁴⁵ ₋₁₂₇
1102	9.42 ± 2.98	364.54 ^{+0.13} _{-0.13}	381.30 ^{+0.15} _{-0.15}	311 ⁺³²³ ₋₁₁₁	387 ⁺⁶³⁵ ₋₁₂₀	326 ⁺²⁷¹ ₋₁₀₁	405 ⁺³⁵⁹ ₋₁₆₈
1110	2.61 ± 0.64	160.57 ^{+0.05} _{-0.05}	146.38 ^{+0.05} _{-0.05}	128 ⁺⁸⁶ ₋₅₇	157 ⁺¹⁶² ₋₅₀	170 ⁺⁸¹ ₋₇₂	158 ⁺⁹⁹ ₋₆₉
1112	32.00 ± 4.47	796.18 ^{+1.38} _{-1.38}	949.32 ^{+1.94} _{-1.94}	654 ⁺⁹⁷⁴ ₋₂₀₁	862 ⁺¹⁷⁷⁸ ₋₂₉₀	586 ⁺⁷⁴⁴ ₋₁₆₄	890 ⁺¹⁰⁵⁴ ₋₄₀₉
1114	0.94 ± 0.16	83.69 ^{+0.11} _{-0.11}	68.39 ^{+0.11} _{-0.11}	60 ⁺³⁵ ₋₃₀	80 ⁺⁵¹ ₋₂₇	102 ⁺³⁹ ₋₃₈	76 ⁺⁴⁵ ₋₃₈
1118	3.94 ± 0.60	208.89 ^{+0.03} _{-0.03}	199.02 ^{+0.04} _{-0.04}	172 ⁺¹³¹ ₋₇₁	209 ⁺²⁵⁶ ₋₆₅	209 ⁺¹¹⁸ ₋₈₀	215 ⁺¹⁴⁹ ₋₉₀
1120	1.70 [†]	122.10 ^{+0.08} _{-0.08}	106.32 ^{+0.08} _{-0.08}	93 ⁺⁵⁷ ₋₄₄	117 ⁺⁹⁹ ₋₃₈	136 ⁺⁵⁶ ₋₆₄	115 ⁺⁶⁷ ₋₅₃
1121*	5.10 ± 0.10	—	—	206 ⁺¹⁷² ₋₈₂	251 ⁺³³⁹ ₋₇₈	239 ⁺¹⁵¹ ₋₈₅	260 ⁺¹⁹⁴ ₋₁₀₈
1122*	3.15 ± 0.06	—	—	146 ⁺¹⁰⁴ ₋₆₃	179 ⁺²⁰⁰ ₋₅₆	187 ⁺⁹⁶ ₋₇₅	182 ⁺¹¹⁹ ₋₇₈
1123	3.77 ± 2.06	203.09 ^{+0.03} _{-0.03}	192.58 ^{+0.04} _{-0.04}	166 ⁺¹²⁵ ₋₇₀	203 ⁺²⁴⁴ ₋₆₃	205 ⁺¹¹³ ₋₇₉	208 ⁺¹⁴² ₋₈₈
1125	1.01 ± 1.00	87.56 ^{+0.11} _{-0.11}	72.10 ^{+0.11} _{-0.11}	64 ⁺³⁷ ₋₃₂	84 ⁺⁵⁵ ₋₂₈	105 ⁺⁴⁰ ₋₅₅	80 ⁺⁴⁷ ₋₄₀
1126	4.87 ± 1.36	239.17 ^{+0.03} _{-0.03}	233.10 ^{+0.04} _{-0.04}	199 ⁺¹⁶³ ₋₈₀	243 ⁺³²² ₋₇₅	233 ⁺¹⁴⁵ ₋₈₄	251 ⁺¹⁸⁵ ₋₁₀₄
1128	2.41 [†]	152.60 ^{+0.05} _{-0.05}	137.93 ^{+0.06} _{-0.06}	121 ⁺⁵⁴ ₋₅₄	148 ⁺¹⁴⁸ ₋₄₇	163 ⁺⁷⁰ ₋₇₀	149 ⁺⁹² ₋₆₆
1129	4.91 ± 2.32	240.43 ^{+0.03} _{-0.03}	234.53 ^{+0.04} _{-0.04}	200 ⁺¹⁶⁵ ₋₈₀	245 ⁺³²⁵ ₋₇₆	234 ⁺¹⁴⁶ ₋₈₄	253 ⁺¹⁸⁶ ₋₁₀₅
1141	6.83 ± 0.10	296.86 ^{+0.06} _{-0.06}	300.00 ^{+0.07} _{-0.07}	251 ⁺²³³ ₋₉₅	309 ⁺⁴⁶⁰ ₋₉₆	277 ⁺²⁰⁰ ₋₉₂	322 ⁺²⁶¹ ₋₁₃₃
1142	3.54 [†]	195.09 ^{+0.04} _{-0.04}	183.75 ^{+0.04} _{-0.04}	159 ⁺¹¹⁷ ₋₆₇	194 ⁺²²⁷ ₋₆₁	198 ⁺¹⁰⁷ ₋₇₇	198 ⁺¹³³ ₋₈₄
1145	0.89 ± 0.57	80.59 ^{+0.11} _{-0.11}	65.45 ^{+0.11} _{-0.11}	58 ⁺³⁴ ₋₂₆	77 ⁺⁴⁸ ₋₂₆	99 ⁺³⁸ ₋₅₃	73 ⁺⁴⁴ ₋₃₇
1148	8.81 ± 0.64	349.28 ^{+0.11} _{-0.11}	362.73 ^{+0.12} _{-0.12}	298 ⁺³⁰² ₋₁₀₇	369 ⁺⁵⁹⁵ ₋₁₁₅	315 ⁺²⁵⁵ ₋₉₉	386 ⁺³³⁷ ₋₁₆₀
1150	0.95 ± 0.19	84.20 ^{+0.11} _{-0.11}	68.88 ^{+0.11} _{-0.11}	61 ⁺³⁶ ₋₃₀	81 ⁺⁵² ₋₂₇	102 ⁺³⁹ ₋₃₉	77 ⁺⁴⁵ ₋₃₉
1152	6.39 ± 1.71	284.50 ^{+0.05} _{-0.05}	285.46 ^{+0.06} _{-0.06}	240 ⁺²¹⁷ ₋₉₂	295 ⁺⁴³⁰ ₋₉₁	268 ⁺¹⁸⁸ ₋₉₀	307 ⁺²⁴⁴ ₋₁₂₇
1153	0.77 [†]	73.44 ^{+0.12} _{-0.12}	58.72 ^{+0.12} _{-0.12}	52 ⁺³¹ ₋₂₆	71 ⁺⁴¹ ₋₂₅	92 ⁺³⁵ ₋₅₀	67 ⁺⁴¹ ₋₃₅
1154	81.50 ± 15.70	1446.67 ^{+5.32} _{-5.30}	1906.57 ^{+8.39} _{-8.35}	1071 ⁺¹⁸⁰⁰ ₋₃₄₄	1448 ⁺³⁰⁷⁶ ₋₅₃₈	878 ⁺¹³⁰³ ₋₇₂₃	1458 ⁺²⁰¹⁹ ₋₇₂₃
1156*	7.09 ± 0.57	—	—	258 ⁺²⁴² ₋₉₆	317 ⁺⁴⁷⁸ ₋₉₈	282 ⁺²⁰⁸ ₋₉₃	331 ⁺²⁷¹ ₋₁₃₆

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
1157*	5.01 ± 0.13	—	—	203^{+168}_{-81}	248^{+332}_{-77}	237^{+149}_{-85}	257^{+190}_{-106}
1159	5.62 ± 0.50	$262.09^{+0.04}_{-0.04}$	$259.39^{+0.04}_{-0.04}$	220^{+190}_{-86}	269^{+375}_{-83}	251^{+166}_{-87}	279^{+214}_{-115}
1167	1.33^{\dagger}	$104.38^{+0.09}_{-0.09}$	$88.53^{+0.09}_{-0.09}$	78^{+46}_{-38}	100^{+75}_{-33}	121^{+47}_{-59}	97^{+56}_{-46}
1190	1.87 ± 0.28	$129.77^{+0.07}_{-0.07}$	$114.15^{+0.07}_{-0.07}$	100^{+62}_{-47}	125^{+111}_{-40}	143^{+61}_{-65}	124^{+73}_{-56}
1192	1.23 ± 0.69	$99.30^{+0.09}_{-0.09}$	$83.52^{+0.10}_{-0.10}$	74^{+43}_{-36}	95^{+69}_{-32}	116^{+45}_{-58}	92^{+53}_{-44}
1196	4.85 ± 1.05	$238.55^{+0.03}_{-0.03}$	$232.39^{+0.04}_{-0.04}$	199^{+163}_{-80}	242^{+321}_{-75}	233^{+144}_{-52}	251^{+184}_{-104}
1197	0.86 ± 0.19	$79.01^{+0.11}_{-0.11}$	$63.95^{+0.11}_{-0.11}$	56^{+33}_{-29}	76^{+47}_{-26}	97^{+37}_{-37}	72^{+43}_{-37}
1200	1.08 ± 0.15	$91.38^{+0.10}_{-0.10}$	$75.80^{+0.10}_{-0.10}$	67^{+39}_{-33}	87^{+60}_{-29}	109^{+42}_{-56}	84^{+49}_{-41}
1204	2.14 ± 0.70	$141.45^{+0.06}_{-0.06}$	$126.23^{+0.07}_{-0.07}$	111^{+71}_{-51}	137^{+129}_{-44}	153^{+68}_{-61}	137^{+82}_{-61}
1211	4.01 ± 1.08	$211.26^{+0.03}_{-0.03}$	$201.65^{+0.04}_{-0.04}$	174^{+133}_{-72}	212^{+120}_{-66}	211^{+151}_{-80}	218^{+151}_{-91}
1212	0.51 ± 0.31	$56.23^{+0.13}_{-0.13}$	$42.99^{+0.13}_{-0.13}$	38^{+24}_{-20}	56^{+31}_{-20}	76^{+35}_{-44}	51^{+35}_{-28}
1213	5.38 ± 1.97	$254.89^{+0.04}_{-0.04}$	$251.08^{+0.04}_{-0.04}$	214^{+181}_{-84}	261^{+358}_{-81}	245^{+159}_{-86}	270^{+204}_{-112}
1218	2.02 ± 0.28	$136.33^{+0.06}_{-0.06}$	$120.92^{+0.07}_{-0.07}$	106^{+67}_{-49}	132^{+121}_{-42}	149^{+65}_{-67}	131^{+78}_{-59}
1221	0.70 ± 0.51	$69.27^{+0.12}_{-0.12}$	$54.85^{+0.12}_{-0.12}$	49^{+29}_{-25}	67^{+37}_{-23}	88^{+34}_{-49}	63^{+39}_{-33}
1223	1.74^{\dagger}	$123.93^{+0.07}_{-0.07}$	$108.18^{+0.08}_{-0.08}$	95^{+58}_{-45}	119^{+102}_{-39}	138^{+57}_{-64}	117^{+69}_{-54}
1235	1.59 ± 0.15	$117.00^{+0.08}_{-0.08}$	$101.14^{+0.08}_{-0.08}$	89^{+54}_{-37}	112^{+92}_{-62}	132^{+54}_{-62}	110^{+64}_{-51}
1244	0.67 ± 0.24	$67.55^{+0.12}_{-0.12}$	$53.26^{+0.12}_{-0.12}$	47^{+28}_{-24}	66^{+36}_{-23}	87^{+34}_{-48}	61^{+39}_{-32}
1279	1.43 ± 0.47	$109.33^{+0.09}_{-0.09}$	$93.45^{+0.09}_{-0.09}$	82^{+49}_{-40}	104^{+82}_{-35}	125^{+50}_{-61}	102^{+59}_{-48}
1288*	3.76 ± 0.16	—	—	166^{+125}_{-70}	202^{+243}_{-63}	204^{+113}_{-87}	207^{+142}_{-87}
1289	4.58 ± 1.40	$229.98^{+0.03}_{-0.03}$	$222.67^{+0.04}_{-0.04}$	191^{+153}_{-77}	233^{+302}_{-72}	226^{+137}_{-83}	240^{+173}_{-100}
1291	10.10 ± 0.85	$381.14^{+0.15}_{-0.15}$	$401.65^{+0.18}_{-0.18}$	326^{+346}_{-114}	406^{+679}_{-126}	337^{+289}_{-103}	425^{+385}_{-177}
1297	36.40 ± 20.90	$864.48^{+1.69}_{-1.69}$	$1045.07^{+2.42}_{-2.41}$	703^{+1074}_{-216}	931^{+1941}_{-317}	621^{+814}_{-175}	958^{+1162}_{-446}
1298	0.99^{\dagger}	$86.50^{+0.11}_{-0.11}$	$71.09^{+0.11}_{-0.11}$	63^{+37}_{-31}	83^{+54}_{-28}	104^{+40}_{-54}	79^{+46}_{-39}
1301	1.18 ± 1.07	$96.70^{+0.10}_{-0.10}$	$80.97^{+0.10}_{-0.10}$	71^{+42}_{-35}	92^{+66}_{-31}	114^{+44}_{-57}	89^{+51}_{-43}
1303	30.40 ± 2.25	$770.51^{+1.27}_{-1.27}$	$913.69^{+1.78}_{-1.77}$	636^{+936}_{-196}	836^{+1715}_{-280}	572^{+718}_{-160}	864^{+1013}_{-395}
1306	1.90 ± 0.82	$131.10^{+0.07}_{-0.07}$	$115.52^{+0.07}_{-0.07}$	101^{+63}_{-47}	126^{+113}_{-41}	144^{+61}_{-66}	125^{+74}_{-57}
1307	15.20 ± 4.56	$494.86^{+0.36}_{-0.36}$	$544.83^{+0.46}_{-0.46}$	422^{+514}_{-139}	536^{+989}_{-170}	412^{+415}_{-118}	561^{+565}_{-240}
1308	3.10^{\dagger}	$179.23^{+0.04}_{-0.04}$	$166.43^{+0.04}_{-0.04}$	145^{+102}_{-63}	177^{+196}_{-56}	185^{+94}_{-75}	180^{+117}_{-77}
1310	1.34 ± 1.07	$104.89^{+0.09}_{-0.09}$	$89.03^{+0.09}_{-0.09}$	78^{+46}_{-38}	100^{+76}_{-33}	121^{+47}_{-59}	97^{+56}_{-46}
1311	0.60^{\dagger}	$62.71^{+0.13}_{-0.13}$	$48.83^{+0.12}_{-0.12}$	43^{+26}_{-22}	61^{+32}_{-22}	82^{+37}_{-31}	57^{+37}_{-31}
1318	1.56^{\dagger}	$115.58^{+0.08}_{-0.08}$	$99.72^{+0.09}_{-0.09}$	88^{+53}_{-42}	111^{+90}_{-36}	131^{+53}_{-62}	108^{+63}_{-51}
1319	0.40^{\dagger}	$48.53^{+0.14}_{-0.14}$	$36.20^{+0.13}_{-0.13}$	32^{+22}_{-17}	50^{+22}_{-18}	68^{+30}_{-41}	45^{+34}_{-25}
1321	1.73 ± 0.10	$123.48^{+0.07}_{-0.07}$	$107.72^{+0.08}_{-0.08}$	95^{+58}_{-44}	119^{+101}_{-39}	138^{+57}_{-64}	117^{+68}_{-54}
1328	0.64 ± 0.29	$65.35^{+0.13}_{-0.13}$	$51.24^{+0.12}_{-0.12}$	45^{+27}_{-23}	64^{+34}_{-22}	84^{+33}_{-48}	59^{+38}_{-32}
1346	5.83 ± 1.29	$268.31^{+0.04}_{-0.04}$	$266.58^{+0.05}_{-0.05}$	226^{+197}_{-87}	276^{+390}_{-86}	256^{+172}_{-88}	287^{+222}_{-118}
1359	32.30 ± 8.84	$800.94^{+1.40}_{-1.40}$	$955.95^{+1.97}_{-1.97}$	658^{+981}_{-202}	867^{+1790}_{-292}	588^{+749}_{-165}	895^{+1061}_{-411}
1365	1.93 ± 0.81	$132.41^{+0.07}_{-0.07}$	$116.87^{+0.07}_{-0.07}$	103^{+64}_{-48}	128^{+115}_{-41}	145^{+62}_{-66}	127^{+75}_{-57}
1379	0.72^{\dagger}	$70.84^{+0.12}_{-0.12}$	$56.31^{+0.12}_{-0.12}$	50^{+30}_{-25}	69^{+39}_{-24}	90^{+35}_{-50}	64^{+40}_{-34}
1382	2.84 ± 0.99	$169.47^{+0.04}_{-0.04}$	$155.90^{+0.05}_{-0.05}$	136^{+94}_{-60}	166^{+178}_{-53}	177^{+87}_{-73}	168^{+107}_{-73}
1384	9.89^{\dagger}	$376.06^{+0.14}_{-0.14}$	$395.40^{+0.17}_{-0.17}$	321^{+339}_{-113}	400^{+666}_{-125}	334^{+283}_{-102}	419^{+377}_{-174}
1385*	13.00 ± 0.25	—	—	383^{+443}_{-129}	482^{+860}_{-152}	382^{+363}_{-112}	505^{+489}_{-214}
1388	1.37 ± 0.45	$106.38^{+0.09}_{-0.09}$	$90.51^{+0.09}_{-0.09}$	80^{+47}_{-38}	102^{+78}_{-34}	122^{+48}_{-60}	99^{+57}_{-47}
1390	14.70 ± 3.00	$484.40^{+0.34}_{-0.34}$	$531.40^{+0.43}_{-0.43}$	413^{+498}_{-166}	524^{+960}_{-166}	406^{+548}_{-234}	549^{+548}_{-234}
1396	2.30 ± 0.57	$148.11^{+0.06}_{-0.06}$	$133.21^{+0.06}_{-0.06}$	117^{+76}_{-53}	144^{+140}_{-46}	159^{+72}_{-69}	144^{+88}_{-64}
1404	5.92 ± 3.76	$270.94^{+0.04}_{-0.04}$	$269.65^{+0.05}_{-0.05}$	228^{+200}_{-88}	279^{+397}_{-86}	258^{+175}_{-88}	290^{+225}_{-120}
1406	3.65 ± 0.20	$198.94^{+0.04}_{-0.04}$	$187.99^{+0.04}_{-0.04}$	163^{+121}_{-62}	198^{+235}_{-62}	201^{+110}_{-78}	203^{+138}_{-86}
1413	1.03 ± 0.46	$88.66^{+0.10}_{-0.10}$	$73.16^{+0.11}_{-0.11}$	64^{+38}_{-32}	85^{+57}_{-29}	106^{+40}_{-55}	81^{+47}_{-40}
1416	0.94 ± 0.46	$83.69^{+0.11}_{-0.11}$	$68.39^{+0.11}_{-0.11}$	60^{+35}_{-30}	80^{+51}_{-27}	102^{+39}_{-54}	76^{+45}_{-38}
1419*	2.34 ± 0.12	—	—	118^{+77}_{-53}	145^{+143}_{-46}	160^{+73}_{-69}	146^{+89}_{-64}

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
1422	2.09 ± 0.25	$139.33^{+0.06}_{-0.06}$	$124.03^{+0.07}_{-0.07}$	109^{+69}_{-50}	135^{+126}_{-43}	151^{+66}_{-67}	134^{+80}_{-60}
1425	1.73 ± 0.10	$123.48^{+0.07}_{-0.07}$	$107.72^{+0.08}_{-0.08}$	95^{+58}_{-44}	119^{+101}_{-39}	138^{+57}_{-64}	117^{+68}_{-54}
1430	0.93 ± 0.67	$82.77^{+0.11}_{-0.11}$	$67.53^{+0.11}_{-0.11}$	60^{+35}_{-30}	79^{+50}_{-27}	101^{+38}_{-53}	75^{+45}_{-38}
1432	0.64 ± 0.28	$65.49^{+0.13}_{-0.13}$	$51.36^{+0.12}_{-0.12}$	45^{+27}_{-23}	64^{+34}_{-22}	85^{+33}_{-48}	59^{+38}_{-32}
1435	21.40 ± 17.90	$615.73^{+0.70}_{-0.69}$	$703.20^{+0.93}_{-0.93}$	519^{+700}_{-164}	671^{+1316}_{-218}	486^{+551}_{-135}	699^{+762}_{-308}
1439	3.62 ± 2.68	$197.89^{+0.04}_{-0.04}$	$186.84^{+0.04}_{-0.04}$	162^{+120}_{-68}	197^{+233}_{-62}	200^{+109}_{-78}	202^{+136}_{-85}
1440*	5.32 ± 0.17	—	—	212^{+179}_{-84}	259^{+354}_{-80}	244^{+158}_{-86}	268^{+202}_{-111}
1443	3.33 ± 0.31	$187.61^{+0.04}_{-0.04}$	$175.55^{+0.04}_{-0.04}$	152^{+110}_{-65}	186^{+212}_{-58}	192^{+101}_{-76}	189^{+125}_{-81}
1446	2.68 ± 0.50	$163.31^{+0.05}_{-0.05}$	$149.30^{+0.05}_{-0.05}$	130^{+88}_{-58}	160^{+167}_{-51}	172^{+83}_{-72}	161^{+101}_{-79}
1447	5.19 ± 0.36	$249.10^{+0.04}_{-0.04}$	$244.44^{+0.04}_{-0.04}$	208^{+175}_{-82}	254^{+145}_{-79}	241^{+154}_{-85}	263^{+197}_{-109}
1449	2.89 ± 0.47	$171.37^{+0.04}_{-0.04}$	$157.94^{+0.05}_{-0.05}$	138^{+95}_{-60}	168^{+181}_{-53}	179^{+88}_{-73}	171^{+109}_{-74}
1452	2.54 ± 0.75	$157.81^{+0.05}_{-0.05}$	$143.45^{+0.06}_{-0.06}$	125^{+84}_{-56}	154^{+157}_{-49}	167^{+79}_{-71}	155^{+96}_{-68}
1453	12.20 ± 1.33	$430.02^{+0.23}_{-0.23}$	$462.42^{+0.28}_{-0.28}$	368^{+417}_{-125}	462^{+812}_{-145}	370^{+343}_{-109}	484^{+461}_{-204}
1456	1.91 ± 1.05	$131.54^{+0.07}_{-0.07}$	$115.97^{+0.07}_{-0.07}$	102^{+64}_{-47}	127^{+113}_{-41}	145^{+62}_{-66}	126^{+74}_{-57}
1458	1.00 ± 0.38	$86.89^{+0.11}_{-0.11}$	$71.46^{+0.11}_{-0.11}$	63^{+37}_{-31}	83^{+55}_{-28}	105^{+40}_{-55}	79^{+46}_{-40}
1459	0.71 ± 0.18	$70.22^{+0.12}_{-0.12}$	$55.72^{+0.12}_{-0.12}$	49^{+29}_{-24}	68^{+38}_{-24}	89^{+40}_{-49}	64^{+34}_{-33}
1461	46.70 ± 39.30	$1013.63^{+2.46}_{-2.45}$	$1258.53^{+3.63}_{-3.62}$	804^{+1283}_{-248}	1075^{+2275}_{-376}	693^{+957}_{-201}	1099^{+1392}_{-523}
1462	10.70 ± 0.98	$395.45^{+0.17}_{-0.17}$	$419.31^{+0.20}_{-0.20}$	338^{+367}_{-118}	422^{+718}_{-132}	347^{+305}_{-105}	442^{+407}_{-185}
1463	0.65^{\dagger}	$65.88^{+0.13}_{-0.13}$	$51.72^{+0.12}_{-0.12}$	46^{+28}_{-24}	64^{+35}_{-23}	85^{+33}_{-32}	60^{+38}_{-32}
1465	6.48 ± 2.10	$287.05^{+0.05}_{-0.05}$	$288.45^{+0.06}_{-0.06}$	243^{+220}_{-92}	298^{+436}_{-92}	270^{+191}_{-91}	310^{+247}_{-128}
1466	8.86 ± 1.02	$350.54^{+0.11}_{-0.11}$	$364.26^{+0.13}_{-0.13}$	299^{+304}_{-107}	371^{+598}_{-115}	316^{+256}_{-99}	388^{+338}_{-161}
1467	4.45 ± 0.28	$225.78^{+0.03}_{-0.03}$	$217.94^{+0.04}_{-0.04}$	187^{+149}_{-76}	228^{+292}_{-71}	223^{+133}_{-82}	235^{+168}_{-98}
1468*	40.40 ± 1.45	—	—	744^{+1159}_{-228}	990^{+2078}_{-341}	650^{+1254}_{-185}	1016^{+1477}_{-477}
1469	1.65 ± 0.54	$119.80^{+0.08}_{-0.08}$	$103.98^{+0.08}_{-0.08}$	91^{+56}_{-43}	115^{+96}_{-38}	134^{+55}_{-63}	113^{+66}_{-52}
1472	3.10 ± 0.35	$179.23^{+0.04}_{-0.04}$	$166.43^{+0.04}_{-0.04}$	145^{+102}_{-63}	177^{+196}_{-56}	185^{+94}_{-75}	180^{+117}_{-77}
1473	9.43 ± 0.08	$364.79^{+0.13}_{-0.13}$	$381.60^{+0.15}_{-0.15}$	311^{+323}_{-111}	387^{+636}_{-120}	326^{+271}_{-101}	405^{+360}_{-168}
1479	10.30^{\dagger}	$385.94^{+0.16}_{-0.16}$	$407.56^{+0.19}_{-0.19}$	330^{+353}_{-115}	411^{+692}_{-128}	341^{+294}_{-103}	431^{+392}_{-180}
1480*	16.70 ± 0.76	—	—	447^{+561}_{-145}	571^{+1073}_{-182}	432^{+450}_{-122}	597^{+615}_{-257}
1481	0.84^{\dagger}	$77.89^{+0.11}_{-0.11}$	$62.90^{+0.11}_{-0.11}$	56^{+33}_{-26}	75^{+45}_{-26}	96^{+37}_{-52}	71^{+42}_{-35}
1482	1.31 ± 1.12	$103.38^{+0.09}_{-0.09}$	$87.54^{+0.10}_{-0.10}$	77^{+46}_{-37}	99^{+74}_{-33}	120^{+47}_{-59}	96^{+55}_{-46}
1484*	2.47 ± 0.18	—	—	123^{+81}_{-55}	151^{+152}_{-48}	165^{+77}_{-70}	152^{+94}_{-67}
1485	0.94 ± 0.79	$83.57^{+0.11}_{-0.11}$	$68.29^{+0.11}_{-0.11}$	60^{+35}_{-30}	80^{+51}_{-27}	102^{+39}_{-54}	76^{+45}_{-38}
1489	3.42 ± 1.61	$190.83^{+0.04}_{-0.04}$	$179.08^{+0.04}_{-0.04}$	155^{+113}_{-66}	189^{+219}_{-59}	195^{+103}_{-82}	193^{+129}_{-82}
1492	1.84 ± 1.79	$128.44^{+0.07}_{-0.07}$	$112.78^{+0.08}_{-0.08}$	99^{+61}_{-46}	124^{+109}_{-40}	142^{+60}_{-65}	122^{+72}_{-56}
1503*	1.10 ± 0.04	—	—	68^{+40}_{-33}	88^{+61}_{-30}	110^{+42}_{-56}	85^{+49}_{-42}
1515	6.21 ± 0.78	$279.35^{+0.05}_{-0.05}$	$279.44^{+0.05}_{-0.05}$	236^{+211}_{-90}	289^{+417}_{-89}	264^{+183}_{-90}	300^{+237}_{-124}
1518	10.20 ± 3.41	$383.54^{+0.15}_{-0.15}$	$404.61^{+0.18}_{-0.18}$	328^{+350}_{-115}	409^{+686}_{-127}	339^{+292}_{-103}	428^{+388}_{-178}
1533	2.01 ± 0.13	$135.89^{+0.06}_{-0.06}$	$120.47^{+0.07}_{-0.07}$	106^{+67}_{-49}	131^{+120}_{-42}	148^{+64}_{-67}	130^{+78}_{-59}
1540	1.50 ± 0.38	$112.72^{+0.08}_{-0.08}$	$96.84^{+0.09}_{-0.09}$	85^{+51}_{-41}	108^{+86}_{-35}	128^{+51}_{-61}	105^{+61}_{-50}
1541*	7.69 ± 0.06	—	—	272^{+263}_{-100}	336^{+519}_{-104}	294^{+224}_{-95}	351^{+294}_{-145}
1546	67.60 ± 26.60	$1283.78^{+4.14}_{-4.13}$	$1658.36^{+6.39}_{-6.37}$	975^{+1622}_{-307}	1315^{+2800}_{-479}	812^{+1184}_{-250}	1331^{+1790}_{-652}
1551	24.10 ± 4.09	$664.28^{+0.86}_{-0.86}$	$768.37^{+1.17}_{-1.17}$	556^{+774}_{-174}	723^{+1445}_{-237}	514^{+841}_{-143}	752^{+841}_{-336}
1552	1.50 ± 0.84	$112.72^{+0.08}_{-0.08}$	$96.84^{+0.09}_{-0.09}$	85^{+51}_{-41}	108^{+86}_{-35}	128^{+51}_{-61}	105^{+61}_{-50}
1553	28.70 ± 0.75	$742.70^{+1.15}_{-1.15}$	$875.30^{+1.61}_{-1.60}$	615^{+894}_{-190}	807^{+1646}_{-269}	557^{+688}_{-155}	835^{+968}_{-379}
1558	3.36 ± 1.65	$188.69^{+0.04}_{-0.04}$	$176.73^{+0.04}_{-0.04}$	153^{+111}_{-65}	187^{+215}_{-59}	192^{+102}_{-76}	191^{+127}_{-81}
1559	5.08 ± 0.52	$245.71^{+0.04}_{-0.04}$	$240.56^{+0.04}_{-0.04}$	205^{+171}_{-82}	250^{+337}_{-78}	238^{+151}_{-85}	259^{+193}_{-108}
1561	1.22 ± 0.65	$98.78^{+0.10}_{-0.10}$	$83.01^{+0.10}_{-0.10}$	73^{+43}_{-36}	94^{+68}_{-32}	116^{+45}_{-58}	91^{+53}_{-44}
1566	39.70 ± 20.50	$913.75^{+1.93}_{-1.93}$	$1114.96^{+2.79}_{-2.79}$	737^{+1145}_{-226}	980^{+2055}_{-337}	645^{+862}_{-184}	1006^{+1238}_{-472}
1567	3.25 ± 0.99	$184.72^{+0.04}_{-0.04}$	$172.40^{+0.04}_{-0.04}$	150^{+107}_{-64}	183^{+207}_{-57}	190^{+99}_{-76}	186^{+122}_{-79}

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
1571*	4.67 ± 0.62	—	—	194 ⁺¹⁵⁶ ₋₇₈	236 ⁺³⁰⁸ ₋₇₃	228 ⁺¹³⁹ ₋₈₃	244 ⁺¹⁷⁷ ₋₁₀₁
1574	5.24 ± 0.91	250.63 ^{+0.04} _{-0.04}	246.19 ^{+0.04} _{-0.04}	210 ⁺¹⁷⁶ ₋₈₃	256 ⁺³⁴⁹ ₋₇₉	242 ⁺¹⁵⁵ ₋₈₆	265 ⁺¹⁹⁹ ₋₁₁₀
1578	3.57 ± 0.16	196.14 ^{+0.04} _{-0.04}	184.91 ^{+0.04} _{-0.04}	160 ⁺¹¹⁸ ₋₆₈	195 ⁺²²⁹ ₋₆₁	199 ⁺¹⁰⁸ ₋₇₈	200 ⁺¹³⁵ ₋₈₅
1579	25.50 ± 1.36	688.68 ^{+0.95} _{-0.94}	801.42 ^{+1.30} _{-1.29}	575 ⁺⁸¹² ₋₁₇₉	750 ⁺¹⁵⁰⁸ ₋₂₄₇	528 ⁺⁶³¹ ₋₁₄₆	778 ⁺⁸⁸¹ ₋₃₄₉
1580	6.70 ± 0.90	293.24 ^{+0.06} _{-0.06}	295.73 ^{+0.06} _{-0.06}	248 ⁺²²⁸ ₋₉₄	305 ⁺⁴⁵¹ ₋₉₄	274 ⁺¹⁹⁷ ₋₉₁	317 ⁺²⁵⁶ ₋₁₃₁
1586	2.05 ± 0.40	137.62 ^{+0.06} _{-0.06}	122.25 ^{+0.07} _{-0.07}	107 ⁺⁶⁸ ₋₄₉	133 ⁺¹²³ ₋₄₃	150 ⁺⁶⁵ ₋₆₇	132 ⁺⁷⁹ ₋₅₉
1588	28.60 ± 5.87	741.05 ^{+1.15} _{-1.15}	873.02 ^{+1.60} _{-1.59}	614 ⁺⁸⁹¹ ₋₁₉₀	805 ⁺¹⁶⁴² ₋₂₆₈	556 ⁺⁶⁸⁷ ₋₁₅₅	834 ⁺⁹⁶⁵ ₋₃₇₈
1590	0.64 ± 0.19	65.68 ^{+0.13} _{-0.13}	51.54 ^{+0.12} _{-0.12}	46 ⁺²⁸ ₋₂₄	64 ⁺³⁴ ₋₂₂	85 ⁺³³ ₋₄₈	60 ⁺³⁸ ₋₃₂
1601*	31.10 ± 1.93	—	—	644 ⁺⁹⁵³ ₋₁₉₈	847 ⁺¹⁷⁴³ ₋₂₈₄	578 ⁺⁷²⁹ ₋₁₆₁	876 ⁺¹⁰³¹ ₋₄₀₁
1604	5.64 ± 1.70	262.69 ^{+0.04} _{-0.04}	260.08 ^{+0.04} _{-0.04}	221 ⁺¹⁹¹ ₋₈₆	270 ⁺³⁷⁷ ₋₈₄	251 ⁺¹⁶⁷ ₋₈₇	280 ⁺²¹⁵ ₋₁₁₆
1606*	3.46 ± 0.07	—	—	157 ⁺¹¹⁵ ₋₆₇	191 ⁺²²² ₋₆₀	196 ⁺¹⁰⁵ ₋₇₇	195 ⁺¹³⁰ ₋₈₃
1609*	4.65 ± 0.08	—	—	193 ⁺¹⁵⁶ ₋₇₈	235 ⁺³⁰⁷ ₋₇₃	228 ⁺¹³⁹ ₋₈₃	243 ⁺¹⁷⁶ ₋₁₀₁
1611	2.21 [†]	144.38 ^{+0.06} _{-0.06}	129.30 ^{+0.06} _{-0.06}	113 ⁺⁷³ ₋₅₂	140 ⁺¹³⁴ ₋₄₅	156 ⁺⁷⁰ ₋₆₈	140 ⁺⁸⁵ ₋₆₂
1614	2.48 ± 0.61	155.42 ^{+0.05} _{-0.05}	140.91 ^{+0.06} _{-0.06}	123 ⁺⁸² ₋₅₅	151 ⁺¹⁵³ ₋₄₈	165 ⁺⁷⁷ ₋₇₁	152 ⁺⁹⁴ ₋₆₇
1623*	11.50 ± 0.46	—	—	354 ⁺³⁹⁴ ₋₁₂₂	444 ⁺⁷⁶⁸ ₋₁₃₉	360 ⁺³²⁵ ₋₁₀₇	465 ⁺⁴³⁶ ₋₁₉₅
1625*	13.30 ± 0.12	—	—	388 ⁺⁴⁵³ ₋₁₃₀	490 ⁺⁸⁷⁸ ₋₁₅₄	386 ⁺¹¹² ₋₁₁₂	513 ⁺⁵⁰⁰ ₋₂₁₇
1626	6.89 ± 2.16	298.52 ^{+0.06} _{-0.06}	301.96 ^{+0.07} _{-0.07}	253 ⁺²³⁵ ₋₉₅	311 ⁺⁴⁶⁴ ₋₉₆	278 ⁺²⁰² ₋₉₂	324 ⁺²⁶³ ₋₁₃₄
1628	2.00 ± 0.27	135.46 ^{+0.06} _{-0.06}	120.02 ^{+0.07} _{-0.07}	105 ⁺⁶⁶ ₋₄₉	131 ⁺¹²⁰ ₋₄₂	148 ⁺⁶⁴ ₋₅₉	130 ⁺⁷⁷ ₋₅₉
1634	50.50 ± 14.60	1065.57 ^{+2.75} _{-2.75}	1334.16 ^{+4.11} _{-4.09}	838 ⁺¹³⁵² ₋₂₅₉	1123 ⁺²³⁸³ ₋₃₉₆	717 ⁺¹⁰⁰⁴ ₋₂₁₀	1146 ⁺¹⁴⁷⁰ ₋₅₄₉
1635	6.26 ± 2.81	280.78 ^{+0.05} _{-0.05}	281.12 ^{+0.05} _{-0.05}	237 ⁺²¹² ₋₉₁	290 ⁺⁴²⁰ ₋₉₀	265 ⁺¹⁸⁴ ₋₉₀	302 ⁺²³⁹ ₋₁₂₅
1636	1.66 ± 0.97	120.26 ^{+0.08} _{-0.08}	104.45 ^{+0.08} _{-0.08}	92 ⁺⁵⁶ ₋₄₃	115 ⁺⁹⁷ ₋₃₈	135 ⁺⁵⁵ ₋₅₂	113 ⁺⁶⁶ ₋₅₂
1637	16.60 [†]	523.51 ^{+0.43} _{-0.43}	581.84 ^{+0.56} _{-0.56}	445 ⁺⁵⁵⁸ ₋₁₄₅	568 ⁺¹⁰⁶⁷ ₋₁₈₁	430 ⁺⁴⁴⁷ ₋₁₂₂	594 ⁺⁶¹¹ ₋₂₅₆
1642	3.06 ± 0.80	177.75 ^{+0.04} _{-0.04}	164.82 ^{+0.05} _{-0.05}	143 ⁺⁶² ₋₆₂	175 ⁺⁵⁵ ₋₅₅	184 ⁺⁷⁵ ₋₇₅	178 ⁺⁷⁶ ₋₇₆
1646	1.18 ± 0.55	96.70 ^{+0.10} _{-0.10}	80.97 ^{+0.10} _{-0.10}	71 ⁺⁴² ₋₃₅	92 ⁺⁶⁶ ₋₃₁	114 ⁺⁴⁴ ₋₅₇	89 ⁺⁵¹ ₋₄₃
1651	5.30 ± 0.74	252.46 ^{+0.04} _{-0.04}	248.29 ^{+0.04} _{-0.04}	211 ⁺¹⁷⁹ ₋₈₃	258 ⁺³⁵³ ₋₈₀	244 ⁺¹⁵⁷ ₋₈₆	267 ⁺²⁰¹ ₋₁₁₁
1652*	2.26 ± 0.10	—	—	115 ⁺⁷⁵ ₋₅₂	142 ⁺¹³⁷ ₋₄₅	158 ⁺⁷¹ ₋₆₉	142 ⁺⁸⁶ ₋₆₃
1653	1.49 ± 0.95	112.24 ^{+0.08} _{-0.08}	96.36 ^{+0.09} _{-0.09}	85 ⁺⁵¹ ₋₄₁	107 ⁺⁸⁶ ₋₃₅	128 ⁺⁵¹ ₋₆₁	105 ⁺⁶¹ ₋₄₉
1655	2.28 ± 0.86	147.29 ^{+0.06} _{-0.06}	132.34 ^{+0.06} _{-0.06}	116 ⁺⁷⁵ ₋₆₂	143 ⁺¹³⁹ ₋₄₆	158 ⁺⁷² ₋₆₉	143 ⁺⁸⁷ ₋₆₃
1656	1.07 ± 0.45	90.84 ^{+0.10} _{-0.10}	75.27 ^{+0.11} _{-0.11}	66 ⁺³⁹ ₋₃₃	87 ⁺⁵⁹ ₋₂₉	108 ⁺⁴¹ ₋₅₆	83 ⁺⁴⁸ ₋₄₁
1657	3.05 ± 1.27	177.37 ^{+0.04} _{-0.04}	164.42 ^{+0.05} _{-0.05}	143 ⁺¹⁰¹ ₋₆₂	175 ⁺¹⁹³ ₋₅₅	184 ⁺⁹³ ₋₇₆	177 ⁺¹¹⁵ ₋₇₆
1659	19.10 ± 9.06	572.59 ^{+0.56} _{-0.56}	646.02 ^{+0.74} _{-0.74}	485 ⁺⁶³³ ₋₁₅₅	623 ⁺¹²⁰¹ ₋₂₀₁	460 ⁺⁵⁰³ ₋₁₂₉	650 ⁺⁶⁹¹ ₋₂₈₄
1660	1.43 ± 0.32	109.33 ^{+0.09} _{-0.09}	93.45 ^{+0.09} _{-0.09}	82 ⁺⁴⁹ ₋₄₀	104 ⁺⁸² ₋₃₅	125 ⁺⁵⁰ ₋₆₁	102 ⁺⁵⁹ ₋₄₈
1661	12.70 ± 1.79	441.20 ^{+0.25} _{-0.25}	476.48 ^{+0.31} _{-0.31}	377 ⁺⁴³³ ₋₁₂₈	475 ⁺⁸⁴² ₋₁₄₉	378 ⁺³⁵⁵ ₋₁₁₁	497 ⁺⁴⁷⁹ ₋₂₁₀
1662	6.40 ± 6.24	284.78 ^{+0.05} _{-0.05}	285.79 ^{+0.06} _{-0.06}	240 ⁺²¹⁷ ₋₉₂	295 ⁺⁴³⁰ ₋₉₁	268 ⁺¹⁸⁸ ₋₉₀	307 ⁺²⁴⁴ ₋₁₂₇
1663*	14.90 ± 0.09	—	—	417 ⁺⁵⁰⁵ ₋₁₃₈	529 ⁺⁹⁷² ₋₁₆₈	408 ⁺⁴⁰⁸ ₋₁₁₇	554 ⁺⁵⁵⁵ ₋₂₃₆
1664	1.18 ± 0.10	96.70 ^{+0.10} _{-0.10}	80.97 ^{+0.10} _{-0.10}	71 ⁺⁴² ₋₃₅	92 ⁺⁶⁶ ₋₃₁	114 ⁺⁴⁴ ₋₅₇	89 ⁺⁵¹ ₋₄₃
1665	47.00 ± 8.70	1017.79 ^{+2.48} _{-2.48}	1264.56 ^{+3.67} _{-3.66}	807 ⁺¹²⁸⁹ ₋₂₄₉	1079 ⁺²²⁸³ ₋₃₇₇	695 ⁺⁹⁶⁰ ₋₂₀₂	1103 ⁺¹³⁹⁸ ₋₅₂₅
1667	0.73 ± 0.71	71.47 ^{+0.12} _{-0.12}	56.88 ^{+0.12} _{-0.12}	50 ⁺³⁰ ₋₂₆	69 ⁺³⁹ ₋₂₄	90 ⁺³⁵ ₋₅₀	65 ⁺⁴⁰ ₋₃₄
1676*	3.45 ± 0.09	—	—	156 ⁺¹¹⁴ ₋₆₆	191 ⁺²²¹ ₋₆₀	196 ⁺¹⁰⁴ ₋₇₇	195 ⁺¹³⁰ ₋₈₃
1679	8.43 ± 4.00	339.58 ^{+0.10} _{-0.10}	350.99 ^{+0.11} _{-0.11}	289 ⁺²⁸⁹ ₋₁₀₅	358 ⁺⁵⁶⁹ ₋₁₁₁	308 ⁺²⁴⁴ ₋₉₇	374 ⁺³²² ₋₁₅₅
1680	24.70 [†]	674.80 ^{+0.90} _{-0.89}	782.59 ^{+1.22} _{-1.22}	564 ⁺⁷⁹⁰ ₋₁₇₆	735 ⁺¹⁴⁷² ₋₂₄₁	520 ⁺⁶¹⁵ ₋₁₄₄	763 ⁺⁸⁵⁸ ₋₃₄₁
1683	5.97 ± 0.25	272.40 ^{+0.05} _{-0.05}	271.34 ^{+0.05} _{-0.05}	229 ⁺²⁰² ₋₈₉	281 ⁺⁴⁰⁰ ₋₈₇	259 ⁺¹⁷⁶ ₋₈₉	292 ⁺²²⁷ ₋₁₂₁
1687	1.04 [†]	89.21 ^{+0.10} _{-0.10}	73.69 ^{+0.11} _{-0.11}	65 ⁺³⁸ ₋₃₂	85 ⁺⁵⁷ ₋₂₉	107 ⁺⁴¹ ₋₅₅	82 ⁺⁴⁸ ₋₄₀
1693	0.77 [†]	73.32 ^{+0.12} _{-0.12}	58.61 ^{+0.12} _{-0.12}	52 ⁺³¹ ₋₂₆	71 ⁺⁴¹ ₋₂₅	92 ⁺³⁵ ₋₃₅	66 ⁺⁴¹ ₋₃₅
1694	23.20 ± 7.64	648.33 ^{+0.80} _{-0.80}	746.86 ^{+1.09} _{-1.08}	544 ⁺⁷⁵⁰ ₋₁₇₁	706 ⁺¹⁴⁰³ ₋₂₃₁	505 ⁺⁵⁸⁷ ₋₁₄₀	735 ⁺⁸¹⁵ ₋₃₂₇
1700	4.64 ± 1.26	231.90 ^{+0.03} _{-0.03}	224.84 ^{+0.04} _{-0.04}	193 ⁺¹⁵⁵ ₋₇₈	235 ⁺³⁰⁶ ₋₇₃	228 ⁺¹³⁸ ₋₈₃	242 ⁺¹⁷⁶ ₋₁₀₁
1701	1.05 ± 0.87	89.75 ^{+0.10} _{-0.10}	74.22 ^{+0.11} _{-0.11}	65 ⁺³⁸ ₋₃₂	86 ⁺⁵⁸ ₋₂₉	107 ⁺⁴¹ ₋₅₅	82 ⁺⁴⁸ ₋₄₁
1704	10.40 ± 3.11	388.33 ^{+0.16} _{-0.16}	410.51 ^{+0.19} _{-0.19}	332 ⁺³⁵⁶ ₋₁₁₆	414 ⁺⁶⁹⁹ ₋₁₂₉	342 ⁺²⁹⁷ ₋₁₀₄	434 ⁺³⁹⁶ ₋₁₈₁
1709*	2.39 ± 0.09	—	—	120 ⁺⁷⁹ ₋₅₄	148 ⁺⁷⁵ ₋₄₇	162 ⁺⁹¹ ₋₇₀	148 ⁺⁹¹ ₋₆₅

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
1711*	7.47 ± 0.16	—	—	267 ⁺²⁵⁵ ₋₉₉	329 ⁺⁵⁰⁴ ₋₁₀₂	290 ⁺²¹⁸ ₋₉₄	343 ⁺²⁸⁵ ₋₁₄₂
1712*	3.83 ± 0.14	—	—	168 ⁺¹²⁷ ₋₇₀	205 ⁺²⁴⁸ ₋₆₄	206 ⁺¹¹⁵ ₋₇₉	210 ⁺¹⁴⁴ ₋₈₉
1714	1.97 ± 1.63	134.16 ^{+0.07} _{-0.07}	118.68 ^{+0.07} _{-0.07}	104 ⁺⁵⁶ ₋₄₈	129 ⁺¹¹⁸ ₋₄₂	147 ⁺⁶⁶ ₋₇₄	128 ⁺⁷⁶ ₋₅₈
1717	2.91 ± 0.33	172.13 ^{+0.04} _{-0.04}	158.76 ^{+0.05} _{-0.05}	138 ⁺⁹⁶ ₋₆₀	169 ⁺¹⁸³ ₋₅₃	179 ⁺⁸⁹ ₋₇₄	171 ⁺¹¹⁰ ₋₇₄
1719	36.90 ± 13.70	872.04 ^{+1.72} _{-1.72}	1055.76 ^{+2.48} _{-2.47}	708 ⁺¹⁰⁸⁵ ₋₂₁₇	938 ⁺¹⁹⁵⁹ ₋₃₂₀	625 ⁺⁸²¹ ₋₁₇₇	966 ⁺¹¹⁷³ ₋₄₅₀
1730	2.45 ± 0.80	154.21 ^{+0.05} _{-0.05}	139.64 ^{+0.06} _{-0.06}	122 ⁺⁸¹ ₋₅₅	150 ⁺¹⁵⁰ ₋₄₈	164 ⁺⁷⁶ ₋₇₀	151 ⁺⁹³ ₋₆₆
1731	9.07 ± 0.62	355.83 ^{+0.12} _{-0.12}	370.68 ^{+0.13} _{-0.13}	304 ⁺³¹¹ ₋₁₀₉	377 ⁺⁶¹² ₋₁₁₇	320 ⁺²⁶² ₋₁₀₀	394 ⁺³⁴⁶ ₋₁₆₃
1733	20.00 ± 0.67	589.68 ^{+0.61} _{-0.61}	668.59 ^{+0.82} _{-0.81}	498 ⁺⁶⁵⁹ ₋₁₅₉	642 ⁺¹²⁴⁷ ₋₂₀₇	471 ⁺⁵²² ₋₁₃₁	670 ⁺⁷¹⁹ ₋₂₉₃
1734	0.88 ± 0.53	80.24 ^{+0.11} _{-0.11}	65.11 ^{+0.11} _{-0.11}	57 ⁺³⁴ ₋₂₉	77 ⁺⁴⁸ ₋₂₆	98 ⁺³⁷ ₋₅₃	73 ⁺⁴³ ₋₃₇
1736	2.27 [†]	146.88 ^{+0.06} _{-0.06}	131.91 ^{+0.06} _{-0.06}	116 ⁺⁷⁵ ₋₅₂	142 ⁺³⁸ ₋₄₆	158 ⁺⁷¹ ₋₆₉	143 ⁺⁸⁷ ₋₆₃
1740	7.16 ± 2.90	305.94 ^{+0.07} _{-0.07}	310.74 ^{+0.07} _{-0.07}	259 ⁺²⁴⁴ ₋₉₇	319 ⁺⁴⁸³ ₋₉₉	284 ⁺²¹⁰ ₋₉₃	333 ⁺²⁷⁴ ₋₁₃₇
1741	15.20 ± 6.44	494.86 ^{+0.36} _{-0.36}	544.83 ^{+0.46} _{-0.46}	422 ⁺⁵¹⁴ ₋₁₃₉	536 ⁺⁹⁸⁹ ₋₁₇₀	412 ⁺⁴¹⁵ ₋₁₁₈	561 ⁺⁵⁶⁵ ₋₂₄₀
1742	1.95 ± 0.60	133.29 ^{+0.07} _{-0.07}	117.78 ^{+0.07} _{-0.07}	103 ⁺⁶⁵ ₋₄₈	128 ⁺¹¹⁶ ₋₄₂	146 ⁺⁶³ ₋₆₆	128 ⁺⁷⁶ ₋₅₈
1747	17.30 ± 13.80	537.51 ^{+0.47} _{-0.47}	600.04 ^{+0.61} _{-0.61}	457 ⁺⁵⁷⁹ ₋₁₄₈	584 ⁺¹¹⁰⁶ ₋₁₈₇	439 ⁺⁴⁶³ ₋₁₂₄	610 ⁺⁶³⁴ ₋₂₆₄
1760	10.10 ± 0.97	381.14 ^{+0.15} _{-0.15}	401.65 ^{+0.18} _{-0.18}	326 ⁺³⁴⁶ ₋₁₁₄	406 ⁺⁶⁷⁹ ₋₁₂₆	337 ⁺²⁸⁹ ₋₁₀₃	425 ⁺³⁸⁵ ₋₁₇₇
1791	0.24 [†]	34.59 ^{+0.14} _{-0.14}	24.38 ^{+0.12} _{-0.12}	23 ⁺¹⁷ ₋₁₅	39 ⁺¹⁴ ₋₁₅	54 ⁺²⁹ ₋₃₅	34 ⁺³³ ₋₂₀
1806	1.60 ± 0.79	117.47 ^{+0.08} _{-0.08}	101.62 ^{+0.08} _{-0.08}	89 ⁺⁵⁴ ₋₄₂	112 ⁺⁹³ ₋₃₇	132 ⁺⁵⁴ ₋₆₃	110 ⁺⁶⁴ ₋₅₁
1807	1.41 ± 0.09	108.35 ^{+0.09} _{-0.09}	92.47 ^{+0.09} _{-0.09}	81 ⁺⁴⁹ ₋₃₉	104 ⁺⁸⁰ ₋₃₄	124 ⁺⁴⁹ ₋₆₀	101 ⁺⁵⁸ ₋₄₈
1815	3.78 ± 0.32	203.43 ^{+0.03} _{-0.03}	192.96 ^{+0.04} _{-0.04}	167 ⁺¹²⁶ ₋₇₀	203 ⁺²⁴⁴ ₋₆₄	205 ⁺¹¹⁴ ₋₇₉	208 ⁺¹⁴³ ₋₈₈
1819	14.50 ± 2.57	480.18 ^{+0.33} _{-0.33}	526.00 ^{+0.42} _{-0.42}	410 ⁺⁴⁹² ₋₁₃₆	519 ⁺⁹⁴⁹ ₋₁₆₄	403 ⁺³⁹⁹ ₋₁₁₆	544 ⁺⁵⁴¹ ₋₂₃₂
1830	19.50 ± 4.26	580.22 ^{+0.59} _{-0.59}	656.08 ^{+0.78} _{-0.77}	491 ⁺⁶⁴⁵ ₋₁₅₇	632 ⁺¹²²¹ ₋₂₀₄	465 ⁺⁵¹¹ ₋₁₃₀	659 ⁺⁷⁰⁴ ₋₂₈₈
1851	25.70 ± 13.90	692.13 ^{+0.96} _{-0.96}	806.10 ^{+1.31} _{-1.31}	577 ⁺⁸¹⁷ ₋₁₈₀	753 ⁺¹⁵¹⁷ ₋₂₄₈	529 ⁺⁶³⁴ ₋₁₄₇	782 ⁺⁸⁸⁶ ₋₃₅₁
1883	4.56 ± 0.28	229.33 ^{+0.03} _{-0.03}	221.94 ^{+0.04} _{-0.04}	190 ⁺¹⁵³ ₋₇₇	232 ⁺³⁰⁰ ₋₇₂	226 ⁺¹⁷³ ₋₈₃	239 ⁺¹⁷³ ₋₁₀₀
1885	1.75 ± 0.23	124.39 ^{+0.07} _{-0.07}	108.64 ^{+0.08} _{-0.08}	95 ⁺⁵⁹ ₋₄₅	119 ⁺¹⁰³ ₋₃₉	138 ⁺⁵⁸ ₋₆₄	118 ⁺⁶⁹ ₋₅₄
1886*	21.00 ± 0.23	—	—	513 ⁺⁶⁸⁸ ₋₁₆₂	663 ⁺¹²⁹⁷ ₋₂₁₅	482 ⁺⁵⁴² ₋₁₃₄	691 ⁺⁷⁵⁰ ₋₃₀₄
1922	2.82 ± 0.59	168.71 ^{+0.05} _{-0.05}	155.08 ^{+0.05} _{-0.05}	135 ⁺⁹³ ₋₅₉	166 ⁺¹⁷⁶ ₋₅₂	176 ⁺⁸⁶ ₋₇₃	167 ⁺¹⁰⁷ ₋₇₂
1924	5.09 ± 0.84	246.02 ^{+0.04} _{-0.04}	240.91 ^{+0.04} _{-0.04}	206 ⁺¹⁷¹ ₋₈₂	251 ⁺³³⁸ ₋₇₈	239 ⁺¹⁵¹ ₋₈₅	260 ⁺¹⁹³ ₋₁₀₈
1953	8.74 ± 5.03	347.50 ^{+0.11} _{-0.11}	360.57 ^{+0.12} _{-0.12}	296 ⁺²⁹⁹ ₋₁₀₇	367 ⁺⁵⁹⁰ ₋₁₁₄	314 ⁺²⁵³ ₋₉₈	384 ⁺³³⁴ ₋₁₅₉
1956	2.42 ± 0.26	153.00 ^{+0.05} _{-0.05}	138.36 ^{+0.06} _{-0.06}	121 ⁺⁸⁰ ₋₅₄	149 ⁺¹⁴⁸ ₋₄₇	163 ⁺⁷⁵ ₋₆₆	149 ⁺⁹² ₋₆₆
1967	1.62 ± 0.16	118.40 ^{+0.08} _{-0.08}	102.56 ^{+0.08} _{-0.08}	90 ⁺⁵⁵ ₋₄₃	113 ⁺⁹⁴ ₋₃₇	133 ⁺⁵⁴ ₋₆₃	111 ⁺⁶⁵ ₋₅₂
1968	11.00 ± 5.59	402.50 ^{+0.18} _{-0.18}	428.05 ^{+0.22} _{-0.22}	344 ⁺³⁷⁷ ₋₁₁₉	430 ⁺⁷³⁷ ₋₁₃₅	352 ⁺³¹² ₋₁₀₆	451 ⁺⁴¹⁸ ₋₁₈₉
1974	0.40 ± 0.07	48.53 ^{+0.14} _{-0.14}	36.20 ^{+0.13} _{-0.13}	32 ⁺²² ₋₁₇	50 ⁺²² ₋₁₈	68 ⁺³⁰ ₋₄₁	45 ⁺³⁴ ₋₂₅
1982	9.36 ± 0.42	363.05 ^{+0.12} _{-0.12}	379.49 ^{+0.15} _{-0.15}	310 ⁺³²¹ ₋₁₁₀	385 ⁺⁶³¹ ₋₁₂₀	325 ⁺²⁶⁹ ₋₁₀₀	403 ⁺³⁵⁷ ₋₁₆₇
1989	9.46 ± 0.42	365.53 ^{+0.13} _{-0.13}	382.51 ^{+0.15} _{-0.15}	312 ⁺³²⁴ ₋₁₁₁	388 ⁺⁶³⁸ ₋₁₂₁	326 ⁺²⁷² ₋₁₀₁	406 ⁺³⁶¹ ₋₁₆₉
1993	0.42 ± 0.15	49.91 ^{+0.14} _{-0.14}	37.41 ^{+0.13} _{-0.13}	33 ⁺²² ₋₁₈	51 ⁺²³ ₋₁₈	70 ⁺³⁰ ₋₄₂	46 ⁺³⁴ ₋₂₆
1997*	3.18 ± 0.14	—	—	147 ⁺¹⁰⁵ ₋₆₃	180 ⁺²⁰² ₋₅₇	188 ⁺⁹⁷ ₋₇₅	183 ⁺¹²⁰ ₋₇₈
2003	15.30 ± 8.02	496.94 ^{+0.37} _{-0.37}	547.50 ^{+0.47} _{-0.47}	424 ⁺⁵¹⁷ ₋₁₃₉	538 ⁺⁹⁹⁵ ₋₁₇₁	414 ⁺⁴¹⁸ ₋₁₁₈	563 ⁺⁵⁶⁸ ₋₂₄₁
2018	0.58 ± 0.18	61.30 ^{+0.13} _{-0.13}	47.55 ^{+0.12} _{-0.12}	42 ⁺²⁶ ₋₂₂	60 ⁺³¹ ₋₂₁	81 ⁺³² ₋₄₆	56 ⁺³⁷ ₋₃₀
2019	3.78 ± 0.42	203.43 ^{+0.03} _{-0.03}	192.96 ^{+0.04} _{-0.04}	167 ⁺¹²⁶ ₋₇₀	203 ⁺²⁴⁴ ₋₆₄	205 ⁺¹¹⁴ ₋₇₉	208 ⁺¹⁴³ ₋₈₈
2035	3.00 ± 2.65	175.51 ^{+0.04} _{-0.04}	162.41 ^{+0.05} _{-0.05}	141 ⁺⁹⁹ ₋₆₁	173 ⁺¹⁸⁹ ₋₅₅	182 ⁺⁹² ₋₇₄	175 ⁺¹¹³ ₋₇₅
2037	17.50 ± 1.01	541.47 ^{+0.48} _{-0.48}	605.21 ^{+0.62} _{-0.62}	460 ⁺⁵⁸⁵ ₋₁₄₉	589 ⁺¹¹¹⁶ ₋₁₈₈	441 ⁺⁴⁶⁸ ₋₁₂₄	615 ⁺⁶⁴¹ ₋₂₆₆
2040	18.60 ± 10.60	562.97 ^{+0.54} _{-0.54}	633.36 ^{+0.70} _{-0.70}	477 ⁺⁶¹⁸ ₋₁₅₃	613 ⁺¹¹⁷⁵ ₋₁₉₇	455 ⁺⁴⁹² ₋₁₂₇	640 ⁺⁶⁷⁶ ₋₂₇₈
2041	37.30 ± 5.20	878.07 ^{+1.75} _{-1.75}	1064.29 ^{+2.52} _{-2.51}	712 ⁺¹⁰⁹⁴ ₋₂₁₉	944 ⁺¹⁹⁷³ ₋₃₂₃	628 ⁺⁸²⁷ ₋₁₇₈	972 ⁺¹¹⁸³ ₋₄₅₃
2043	3.66 [†]	199.28 ^{+0.04} _{-0.04}	188.37 ^{+0.04} _{-0.04}	163 ⁺¹²¹ ₋₆₉	199 ⁺²³⁶ ₋₆₂	202 ⁺¹¹⁰ ₋₈₆	203 ⁺¹³⁸ ₋₈₆
2044	51.30 ± 17.60	1076.33 ^{+2.82} _{-2.81}	1349.89 ^{+4.21} _{-4.19}	845 ⁺¹³⁶⁶ ₋₂₆₁	1133 ⁺²⁴⁰⁵ ₋₄₀₀	722 ⁺¹⁰¹³ ₋₂₁₂	1156 ⁺¹⁴⁸⁶ ₋₅₅₄
2047	3.06 ± 1.11	177.75 ^{+0.04} _{-0.04}	164.82 ^{+0.05} _{-0.05}	143 ⁺¹⁰¹ ₋₆₂	175 ⁺¹⁹³ ₋₅₅	184 ⁺⁹³ ₋₇₅	178 ⁺¹¹⁵ ₋₇₆
2049	21.40 ± 7.57	615.73 ^{+0.70} _{-0.69}	703.20 ^{+0.93} _{-0.93}	519 ⁺⁷⁰⁰ ₋₁₆₄	671 ⁺¹³¹⁶ ₋₂₁₈	486 ⁺⁵⁵¹ ₋₁₃₅	699 ⁺⁷⁶² ₋₃₀₈
2053	4.87 ± 1.49	239.17 ^{+0.03} _{-0.03}	233.10 ^{+0.04} _{-0.04}	199 ⁺¹⁶³ ₋₈₀	243 ⁺³²² ₋₇₅	233 ⁺¹⁴⁵ ₋₈₄	251 ⁺¹⁸⁵ ₋₁₀₄
2056	10.40 ± 7.61	388.33 ^{+0.16} _{-0.16}	410.51 ^{+0.19} _{-0.19}	332 ⁺³⁵⁶ ₋₁₁₆	414 ⁺⁶⁹⁹ ₋₁₂₉	342 ⁺²⁹⁷ ₋₁₀₄	434 ⁺³⁹⁶ ₋₁₈₁

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
2061*	8.54 ± 0.24	—	—	292 ⁺²⁹² ₋₁₀₆	361 ⁺⁵⁷⁷ ₋₁₁₂	310 ⁺²⁴⁷ ₋₉₈	378 ⁺³²⁶ ₋₁₅₆
2067	5.52 ± 0.05	259.10 ^{+0.04} _{-0.04}	255.94 ^{+0.04} _{-0.04}	217 ⁺¹⁸⁶ ₋₈₅	266 ⁺³⁶⁸ ₋₈₂	249 ⁺¹⁶³ ₋₈₇	276 ⁺²¹⁰ ₋₁₁₄
2068	4.04 ± 0.55	212.26 ^{+0.03} _{-0.03}	202.78 ^{+0.04} _{-0.04}	175 ⁺¹³⁵ ₋₇₂	213 ⁺²⁶³ ₋₆₆	212 ⁺¹²¹ ₋₈₀	219 ⁺¹⁵² ₋₉₂
2069	2.41 [†]	152.60 ^{+0.05} _{-0.05}	137.93 ^{+0.06} _{-0.06}	121 ⁺⁸⁰ ₋₅₄	148 ⁺¹⁴⁸ ₋₄₇	163 ⁺⁷⁵ ₋₇₀	149 ⁺⁹² ₋₆₆
2070	2.09 ± 0.67	139.33 ^{+0.06} _{-0.06}	124.03 ^{+0.07} _{-0.07}	109 ⁺⁶⁹ ₋₅₀	135 ⁺¹²⁶ ₋₄₃	151 ⁺⁶⁶ ₋₆₇	134 ⁺⁸⁰ ₋₆₀
2074	3.89 ± 0.25	207.20 ^{+0.03} _{-0.03}	197.14 ^{+0.04} _{-0.04}	170 ⁺¹²⁹ ₋₇₁	207 ⁺²⁵² ₋₆₅	208 ⁺¹¹⁷ ₋₉₀	213 ⁺¹⁴⁷ ₋₉₀
2077	1.25 ± 0.30	100.33 ^{+0.09} _{-0.09}	84.53 ^{+0.10} _{-0.10}	74 ⁺⁴⁴ ₋₃₆	96 ⁺⁷⁰ ₋₃₂	117 ⁺⁴⁵ ₋₅₈	93 ⁺⁵³ ₋₄₅
2079	1.97 ± 0.81	134.16 ^{+0.07} _{-0.07}	118.68 ^{+0.07} _{-0.07}	104 ⁺⁶⁶ ₋₄₈	129 ⁺¹¹⁸ ₋₄₂	147 ⁺⁶³ ₋₆₆	128 ⁺⁷⁶ ₋₅₈
2080*	3.96 ± 0.15	—	—	172 ⁺¹³² ₋₇₂	210 ⁺²⁵⁷ ₋₈₀	210 ⁺¹¹⁹ ₋₉₁	216 ⁺¹⁴⁹ ₋₉₁
2081	20.30 ± 3.46	595.32 ^{+0.63} _{-0.63}	676.06 ^{+0.84} _{-0.84}	503 ⁺¹⁶⁰ ₋₁₆₀	648 ⁺²⁶² ₋₂₁₀	474 ⁺⁵²⁸ ₋₁₃₂	676 ⁺⁷²⁹ ₋₂₉₇
2083	4.81 ± 0.05	237.29 ^{+0.03} _{-0.03}	230.96 ^{+0.04} _{-0.04}	198 ⁺¹⁶¹ ₋₇₉	241 ⁺³¹⁸ ₋₇₅	232 ⁺¹⁴³ ₋₈₄	249 ⁺¹⁸² ₋₁₀₃
2087	5.99 ± 0.97	272.99 ^{+0.05} _{-0.05}	272.02 ^{+0.05} _{-0.05}	230 ⁺²⁰³ ₋₈₉	281 ⁺⁴⁰² ₋₈₇	259 ⁺¹⁷⁷ ₋₈₉	293 ⁺²²⁸ ₋₁₂₁
2090*	3.41 ± 0.16	—	—	155 ⁺¹¹³ ₋₆₆	189 ⁺²¹⁸ ₋₅₉	194 ⁺¹⁰³ ₋₇₇	193 ⁺¹²⁸ ₋₈₂
2093	2.98 ± 0.78	174.76 ^{+0.04} _{-0.04}	161.60 ^{+0.05} _{-0.05}	141 ⁺⁹⁸ ₋₆₁	172 ⁺¹⁸⁸ ₋₅₄	181 ⁺⁹¹ ₋₇₄	174 ⁺¹¹² ₋₇₅
2095	522.00 ± 427.00	4737.72 ^{+46.67} _{-46.22}	7617.84 ^{+90.63} _{-89.57}	2517 ⁺³¹¹³ ₋₁₉₇₀	3244 ⁺⁶⁷⁹⁰ ₋₁₃₆₉	1712 ⁺²³⁸⁰ ₋₆₇₁	3171 ⁺⁶¹⁷⁴ ₋₁₄₈₁
2099	5.25 ± 2.17	250.93 ^{+0.04} _{-0.04}	246.54 ^{+0.04} _{-0.04}	210 ⁺¹⁷⁷ ₋₈₃	256 ⁺³⁴⁹ ₋₈₆	242 ⁺¹⁵⁶ ₋₈₆	266 ⁺¹⁹⁹ ₋₁₁₀
2101	6.16 ± 0.69	277.91 ^{+0.05} _{-0.05}	277.76 ^{+0.05} _{-0.05}	234 ⁺²⁰⁹ ₋₉₀	287 ⁺⁴¹³ ₋₈₉	263 ⁺¹⁸² ₋₈₉	299 ⁺²³⁵ ₋₁₂₃
2102	1.70 ± 0.39	122.10 ^{+0.08} _{-0.08}	106.32 ^{+0.08} _{-0.08}	93 ⁺⁵⁷ ₋₄₄	117 ⁺⁹⁹ ₋₃₈	136 ⁺⁵⁶ ₋₆₄	115 ⁺⁶⁷ ₋₅₃
2103	18.30 ± 5.01	557.15 ^{+0.52} _{-0.52}	625.73 ^{+0.68} _{-0.68}	472 ⁺⁶⁰⁹ ₋₁₅₂	606 ⁺¹¹⁵⁹ ₋₁₉₅	451 ⁺⁴⁸⁵ ₋₁₂₇	633 ⁺⁶⁶⁶ ₋₂₇₅
2105	1.03 [†]	88.66 ^{+0.10} _{-0.10}	73.16 ^{+0.11} _{-0.11}	64 ⁺³⁸ ₋₃₂	85 ⁺⁵⁷ ₋₂₉	106 ⁺⁴⁰ ₋₅₅	81 ⁺⁴⁷ ₋₄₀
2106	7.85 ± 0.55	324.46 ^{+0.08} _{-0.08}	332.82 ^{+0.09} _{-0.09}	276 ⁺²⁶⁸ ₋₁₀₁	341 ⁺⁵³⁰ ₋₁₀₆	297 ⁺²²⁹ ₋₉₅	356 ⁺³⁰⁰ ₋₁₄₇
2110*	13.00 ± 0.29	—	—	383 ⁺⁴⁴³ ₋₁₂₉	482 ⁺⁸⁶⁰ ₋₁₁₅₂	382 ⁺³⁶³ ₋₂₁₄	505 ⁺⁴⁸⁹ ₋₂₁₄
2111	1.56 ± 0.32	115.58 ^{+0.08} _{-0.08}	99.72 ^{+0.09} _{-0.09}	88 ⁺⁵³ ₋₄₂	111 ⁺⁹⁰ ₋₃₆	131 ⁺⁵³ ₋₆₂	108 ⁺⁶³ ₋₅₁
2112	20.20 ± 2.97	593.44 ^{+0.63} _{-0.63}	673.57 ^{+0.83} _{-0.83}	501 ⁺⁶⁶⁵ ₋₁₅₉	646 ⁺¹²⁵⁷ ₋₂₀₉	473 ⁺⁵²⁶ ₋₁₃₂	674 ⁺⁷²⁵ ₋₂₉₆
2114	7.82 ± 5.01	323.67 ^{+0.08} _{-0.08}	331.87 ^{+0.09} _{-0.09}	275 ⁺²⁶⁷ ₋₁₀₁	340 ⁺⁵²⁸ ₋₁₀₅	297 ⁺²²⁸ ₋₉₅	355 ⁺²⁹⁹ ₋₁₄₇
2115	4.09 ± 1.90	213.94 ^{+0.03} _{-0.03}	204.65 ^{+0.04} _{-0.04}	176 ⁺¹³⁶ ₋₇₃	215 ⁺²⁶⁷ ₋₆₇	213 ⁺¹²² ₋₈₀	221 ⁺¹⁵⁴ ₋₉₃
2117	42.20 ± 34.10	950.10 ^{+2.12} _{-2.11}	1166.92 ^{+3.09} _{-3.08}	762 ⁺¹¹⁹⁶ ₋₂₃₄	1015 ⁺²¹³⁷ ₋₃₅₁	663 ⁺⁸⁹⁷ ₋₁₉₀	1040 ⁺¹²⁹⁵ ₋₄₉₁
2119	1.81 ± 0.67	127.09 ^{+0.07} _{-0.07}	111.41 ^{+0.08} _{-0.08}	98 ⁺⁶¹ ₋₄₆	122 ⁺¹⁰⁷ ₋₄₀	141 ⁺⁵⁹ ₋₆₅	121 ⁺⁷¹ ₋₅₅
2122*	8.62 ± 0.43	—	—	294 ⁺²⁹⁵ ₋₁₀₆	364 ⁺⁵⁸² ₋₁₁₃	312 ⁺²⁵⁰ ₋₉₈	380 ⁺³²⁹ ₋₁₅₇
2123	1.24 ± 0.17	99.82 ^{+0.09} _{-0.09}	84.02 ^{+0.10} _{-0.10}	74 ⁺⁴⁴ ₋₃₆	95 ⁺⁷⁰ ₋₃₂	116 ⁺⁴⁵ ₋₅₈	92 ⁺⁵³ ₋₄₅
2125	34.90 ± 1.94	841.55 ^{+1.58} _{-1.58}	1012.78 ^{+2.25} _{-2.25}	687 ⁺¹⁰⁴¹ ₋₂₁₁	908 ⁺¹⁸⁸⁷ ₋₃₀₈	609 ⁺⁷⁹¹ ₋₁₇₁	936 ⁺¹¹²⁵ ₋₄₃₃
2126	8.77 ± 2.27	348.26 ^{+0.11} _{-0.11}	361.50 ^{+0.12} _{-0.12}	297 ⁺³⁰⁰ ₋₁₀₇	368 ⁺⁵⁹² ₋₁₁₄	314 ⁺²⁵⁴ ₋₉₉	385 ⁺³³⁵ ₋₁₅₉
2129	1.08 ± 0.89	91.38 ^{+0.10} _{-0.10}	75.80 ^{+0.10} _{-0.10}	67 ⁺³⁹ ₋₃₃	87 ⁺⁶⁰ ₋₂₉	109 ⁺⁴² ₋₅₆	84 ⁺⁴⁹ ₋₄₁
2132	2.71 [†]	164.48 ^{+0.05} _{-0.05}	150.55 ^{+0.05} _{-0.05}	131 ⁺⁸⁹ ₋₅₈	161 ⁺¹⁶⁹ ₋₅₁	173 ⁺⁸³ ₋₇₂	163 ⁺¹⁰² ₋₇₁
2133	1.43 ± 1.29	109.33 ^{+0.09} _{-0.09}	93.45 ^{+0.09} _{-0.09}	82 ⁺⁴⁹ ₋₄₀	104 ⁺⁸² ₋₃₅	125 ⁺⁵⁰ ₋₆₁	102 ⁺⁵⁹ ₋₄₈
2138*	3.11 ± 0.08	—	—	145 ⁺¹⁰³ ₋₆₃	177 ⁺¹⁹⁷ ₋₅₆	185 ⁺⁹⁵ ₋₇₅	180 ⁺¹¹⁷ ₋₇₇
2140	0.55 [†]	59.52 ^{+0.13} _{-0.13}	45.94 ^{+0.12} _{-0.12}	41 ⁺²⁵ ₋₂₁	59 ⁺²⁹ ₋₂₁	79 ⁺³² ₋₄₆	54 ⁺³⁶ ₋₂₉
2142	4.99 ± 2.78	242.92 ^{+0.04} _{-0.04}	237.37 ^{+0.04} _{-0.04}	203 ⁺¹⁶⁸ ₋₈₁	247 ⁺³³¹ ₋₇₇	236 ⁺¹⁴⁸ ₋₈₅	256 ⁺¹⁸⁹ ₋₁₀₆
2143	4.37 ± 1.13	223.18 ^{+0.03} _{-0.03}	215.01 ^{+0.04} _{-0.04}	185 ⁺¹⁴⁶ ₋₇₅	225 ⁺²⁸⁷ ₋₇₀	221 ⁺¹³¹ ₋₈₂	232 ⁺¹⁶⁵ ₋₉₇
2145	13.30 ± 8.05	454.40 ^{+0.27} _{-0.27}	493.18 ^{+0.34} _{-0.34}	388 ⁺⁴⁵³ ₋₁₃₀	490 ⁺⁸⁷⁸ ₋₁₅₄	386 ⁺³⁷⁰ ₋₁₁₂	513 ⁺⁵⁰⁰ ₋₂₁₇
2146	32.30 ± 17.20	800.94 ^{+1.40} _{-1.40}	955.95 ^{+1.97} _{-1.97}	658 ⁺⁹⁸¹ ₋₂₀₂	867 ⁺¹⁷⁹⁰ ₋₂₉₂	588 ⁺⁷⁴⁹ ₋₁₆₅	895 ⁺¹⁰⁶¹ ₋₄₁₁
2148	1.50 ± 0.53	112.72 ^{+0.08} _{-0.08}	96.84 ^{+0.09} _{-0.09}	85 ⁺⁵¹ ₋₄₁	108 ⁺⁸⁶ ₋₃₅	128 ⁺⁵¹ ₋₆₁	105 ⁺⁶¹ ₋₅₀
2149	1.03 ± 0.13	88.66 ^{+0.10} _{-0.10}	73.16 ^{+0.11} _{-0.11}	64 ⁺³⁸ ₋₃₂	85 ⁺⁵⁷ ₋₂₉	106 ⁺⁴⁰ ₋₅₅	81 ⁺⁴⁷ ₋₄₀
2151*	22.30 ± 0.50	—	—	532 ⁺⁷²⁵ ₋₁₆₇	689 ⁺¹³⁶⁰ ₋₂₂₄	495 ⁺⁵⁶⁹ ₋₁₃₈	717 ⁺⁷⁸⁹ ₋₃₁₇
2152	0.14 [†]	24.66 ^{+0.14} _{-0.14}	16.42 ^{+0.11} _{-0.11}	16 ⁺¹⁵ ₋₉	31 ⁺¹¹ ₋₁₂	44 ⁺²⁹ ₋₃₁	27 ⁺³³ ₋₁₇
2155	26.50 ± 5.32	705.81 ^{+1.01} _{-1.01}	824.75 ^{+1.39} _{-1.39}	588 ⁺⁸³⁸ ₋₁₈₃	768 ⁺¹⁵⁵² ₋₂₅₄	537 ⁺⁶⁴⁹ ₋₁₄₉	796 ⁺⁹⁰⁸ ₋₃₅₉
2156*	8.31 ± 0.09	—	—	287 ⁺²⁸⁴ ₋₁₀₄	354 ⁺⁵⁶¹ ₋₁₁₀	306 ⁺²⁴¹ ₋₉₇	370 ⁺³¹⁸ ₋₁₅₃
2159	2.25 [†]	146.05 ^{+0.06} _{-0.06}	131.04 ^{+0.06} _{-0.06}	115 ⁺⁷⁴ ₋₅₂	142 ⁺¹³⁷ ₋₄₅	157 ⁺⁷¹ ₋₆₃	142 ⁺⁸⁶ ₋₆₃
2161	24.50 ± 15.90	671.31 ^{+0.88} _{-0.88}	777.86 ^{+1.20} _{-1.20}	562 ⁺⁷⁸⁵ ₋₁₇₅	731 ⁺¹⁴⁶³ ₋₂₄₀	518 ⁺⁶¹² ₋₁₄₄	760 ⁺⁸⁵² ₋₃₃₉

Continued on next page

Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
2163	17.30 ± 5.46	537.51 ^{+0.47} _{-0.47}	600.04 ^{+0.61} _{-0.61}	457 ⁺⁵⁷⁹ ₋₁₄₈	584 ⁺¹¹⁰⁶ ₋₁₈₇	439 ⁺⁴⁶³ ₋₁₂₄	610 ⁺⁶³⁴ ₋₂₆₄
2167	23.60 ± 4.69	655.45 ^{+0.83} _{-0.83}	756.44 ^{+1.12} _{-1.12}	550 ⁺⁷⁶¹ ₋₁₇₂	714 ⁺¹⁴²¹ ₋₂₃₄	509 ⁺⁵⁹⁴ ₋₁₄₁	742 ⁺⁸²⁷ ₋₃₃₁
2181	2.56 ± 0.86	158.60 ^{+0.05} _{-0.05}	144.29 ^{+0.06} _{-0.06}	126 ⁺⁸⁴ ₋₅₆	155 ⁺¹⁵⁸ ₋₄₉	168 ⁺⁷⁹ ₋₇₁	156 ⁺⁹⁷ ₋₆₈
2187	1.87 ± 1.65	129.77 ^{+0.07} _{-0.07}	114.15 ^{+0.07} _{-0.07}	100 ⁺⁶² ₋₄₇	125 ⁺¹¹¹ ₋₄₀	143 ⁺⁶¹ ₋₆₅	124 ⁺⁷³ ₋₅₆
2188	2.50 ± 0.63	156.22 ^{+0.05} _{-0.05}	141.76 ^{+0.06} _{-0.06}	124 ⁺⁸² ₋₅₅	152 ⁺¹⁵⁴ ₋₄₈	166 ⁺⁷⁸ ₋₇₁	153 ⁺⁹⁵ ₋₆₇
2189	2.09 ± 0.70	139.33 ^{+0.06} _{-0.06}	124.03 ^{+0.07} _{-0.07}	109 ⁺⁶⁹ ₋₅₀	135 ⁺¹²⁶ ₋₄₃	151 ⁺⁶⁶ ₋₆₇	134 ⁺⁸⁰ ₋₆₀
2190	3.62 ± 0.35	197.89 ^{+0.04} _{-0.04}	186.84 ^{+0.04} _{-0.04}	162 ⁺¹²⁰ ₋₆₈	197 ⁺²³³ ₋₆₂	200 ⁺¹⁰⁹ ₋₇₈	202 ⁺¹³⁶ ₋₈₅
2191	8.07 ± 1.63	330.24 ^{+0.09} _{-0.09}	339.75 ^{+0.10} _{-0.10}	281 ⁺²⁷⁶ ₋₁₀₃	347 ⁺⁵⁴⁵ ₋₁₀₈	301 ⁺²³⁵ ₋₉₆	363 ⁺³⁰⁸ ₋₁₅₀
2193*	9.44 ± 0.33	—	—	312 ⁺³²⁴ ₋₁₁₁	387 ⁺⁶³⁶ ₋₁₂₀	326 ⁺²⁷² ₋₁₀₁	405 ⁺³⁶⁰ ₋₁₆₈
2197	2.35 ± 0.41	150.16 ^{+0.06} _{-0.06}	135.36 ^{+0.06} _{-0.06}	118 ⁺⁵³ ₋₅₃	146 ⁺⁷⁸ ₋₄₇	161 ⁺⁹⁰ ₋₇₀	146 ⁺⁶⁵ ₋₆₅
2201	13.10 ± 5.56	450.02 ^{+0.27} _{-0.27}	487.63 ^{+0.33} _{-0.33}	384 ⁺⁴⁴⁷ ₋₁₂₉	485 ⁺⁸⁶⁶ ₋₁₅₃	384 ⁺³⁶⁵ ₋₁₁₂	508 ⁺⁴⁹³ ₋₂₁₅
2202	0.56 [†]	59.80 ^{+0.13} _{-0.13}	46.19 ^{+0.12} _{-0.12}	41 ⁺²⁵ ₋₂₁	59 ⁺³⁰ ₋₂₁	79 ⁺³² ₋₄₆	54 ⁺³⁶ ₋₃₀
2203	2.65 ± 1.09	198.94 ^{+0.04} _{-0.04}	187.99 ^{+0.04} _{-0.04}	163 ⁺¹²¹ ₋₆₈	198 ⁺²³⁵ ₋₆₂	201 ⁺¹¹⁰ ₋₇₈	203 ⁺¹³⁸ ₋₈₆
2204	3.52 ± 2.47	157.01 ^{+0.05} _{-0.05}	142.60 ^{+0.06} _{-0.06}	125 ⁺⁸³ ₋₅₆	153 ⁺¹⁵⁵ ₋₄₉	167 ⁺⁷⁸ ₋₇₁	154 ⁺⁹⁶ ₋₆₈
2205	95.00 [†]	1595.48 ^{+6.50} _{-6.47}	2137.50 ^{+10.42} _{-10.37}	1154 ⁺¹⁹⁴⁷ ₋₃₇₇	1563 ⁺³³⁰⁵ ₋₅₉₀	934 ⁺¹⁴⁰⁰ ₋₃₀₆	1568 ⁺²²²⁴ ₋₇₈₃
2206	14.30 ± 6.41	475.94 ^{+0.32} _{-0.32}	520.58 ^{+0.40} _{-0.40}	406 ⁺⁴⁸⁵ ₋₁₃₅	515 ⁺⁹³⁷ ₋₁₆₃	400 ⁺³⁹⁴ ₋₁₁₅	539 ⁺⁵³⁴ ₋₂₂₉
2207	0.76 [†]	72.83 ^{+0.12} _{-0.12}	58.15 ^{+0.12} _{-0.12}	51 ⁺³⁰ ₋₂₆	70 ⁺⁴¹ ₋₂₄	91 ⁺³⁵ ₋₃₀	66 ⁺⁴⁰ ₋₃₄
2211	6.64 ± 0.51	291.56 ^{+0.06} _{-0.06}	293.75 ^{+0.06} _{-0.06}	247 ⁺²²⁶ ₋₉₃	303 ⁺⁴⁴⁷ ₋₉₄	273 ⁺¹⁹⁵ ₋₉₁	315 ⁺²⁵³ ₋₁₃₀
2213	3.36 ± 0.52	188.69 ^{+0.04} _{-0.04}	176.73 ^{+0.04} _{-0.04}	153 ⁺¹¹¹ ₋₆₅	187 ⁺²¹⁵ ₋₅₉	193 ⁺¹⁰² ₋₈₁	191 ⁺¹²⁷ ₋₈₁
2217	91.00 ± 8.63	1552.23 ^{+6.14} _{-6.12}	2070.00 ^{+9.81} _{-9.77}	1130 ⁺¹⁹⁰⁶ ₋₃₆₇	1530 ⁺³²⁴⁰ ₋₅₇₅	918 ⁺¹³⁷³ ₋₂₉₈	1537 ⁺²¹⁶⁵ ₋₇₆₆
2219	1.22 ± 0.71	98.78 ^{+0.10} _{-0.10}	83.01 ^{+0.10} _{-0.10}	73 ⁺⁴³ ₋₃₆	94 ⁺⁶⁸ ₋₃₂	116 ⁺⁴⁵ ₋₄₄	91 ⁺⁵³ ₋₄₄
2220	11.90 ± 3.51	423.23 ^{+0.22} _{-0.22}	453.91 ^{+0.26} _{-0.26}	362 ⁺⁴⁰⁷ ₋₁₂₄	454 ⁺⁷⁹³ ₋₁₄₂	366 ⁺³³⁵ ₋₁₀₈	476 ⁺⁴⁵⁰ ₋₂₀₀
2228*	3.47 ± 0.13	—	—	157 ⁺¹¹⁵ ₋₆₇	191 ⁺²²² ₋₆₀	196 ⁺¹⁰⁵ ₋₇₇	195 ⁺¹³¹ ₋₈₃
2230	1.32 [†]	103.88 ^{+0.09} _{-0.09}	88.04 ^{+0.09} _{-0.09}	77 ⁺⁴⁶ ₋₃₈	99 ⁺⁷⁵ ₋₃₃	120 ⁺⁴⁷ ₋₅₉	96 ⁺⁵⁶ ₋₄₆
2232	3.91 ± 0.28	207.88 ^{+0.03} _{-0.03}	197.89 ^{+0.04} _{-0.04}	171 ⁺¹³⁰ ₋₇₁	208 ⁺²⁵⁴ ₋₆₅	209 ⁺¹¹⁷ ₋₇₉	214 ⁺¹⁴⁸ ₋₉₀
2233	11.20 ± 4.50	407.16 ^{+0.19} _{-0.19}	433.84 ^{+0.23} _{-0.23}	348 ⁺³⁸⁴ ₋₁₂₀	436 ⁺⁷⁴⁹ ₋₁₃₆	355 ⁺³¹⁷ ₋₁₀₆	457 ⁺⁴²⁵ ₋₁₉₁
2240	1.14 ± 0.73	94.60 ^{+0.10} _{-0.10}	78.92 ^{+0.10} _{-0.10}	70 ⁺⁴¹ ₋₃₄	90 ⁺⁶³ ₋₃₀	112 ⁺⁴³ ₋₅₇	87 ⁺⁵⁰ ₋₄₃
2244	1.86 ± 0.65	129.33 ^{+0.07} _{-0.07}	113.70 ^{+0.08} _{-0.07}	100 ⁺⁶² ₋₄₆	124 ⁺¹¹⁰ ₋₄₀	143 ⁺⁷³ ₋₆₀	123 ⁺⁷³ ₋₅₆
2252	1.78 ± 0.46	125.74 ^{+0.07} _{-0.07}	110.03 ^{+0.08} _{-0.08}	97 ⁺⁶⁰ ₋₄₅	121 ⁺¹⁰⁵ ₋₃₉	140 ⁺⁵⁸ ₋₆₄	119 ⁺⁷⁰ ₋₅₅
2253	1.89 ± 0.35	130.65 ^{+0.07} _{-0.07}	115.06 ^{+0.07} _{-0.07}	101 ⁺⁶³ ₋₄₇	126 ⁺¹¹² ₋₄₁	144 ⁺⁷⁴ ₋₆₆	125 ⁺⁷⁴ ₋₅₇
2254	3.38 ± 1.20	189.41 ^{+0.04} _{-0.04}	177.52 ^{+0.04} _{-0.04}	154 ⁺¹¹² ₋₆₆	188 ⁺²¹⁶ ₋₅₉	194 ⁺¹⁰² ₋₇₇	192 ⁺¹²⁷ ₋₈₂
2255	2.61 ± 0.14	160.57 ^{+0.05} _{-0.05}	146.38 ^{+0.05} _{-0.05}	128 ⁺⁸⁶ ₋₅₇	157 ⁺¹⁶² ₋₅₀	170 ⁺⁸¹ ₋₆₉	158 ⁺⁹⁹ ₋₆₉
2265	4.61 ± 2.20	230.94 ^{+0.03} _{-0.03}	223.76 ^{+0.04} _{-0.04}	192 ⁺¹⁵⁴ ₋₇₈	234 ⁺³⁰⁴ ₋₇₃	227 ⁺¹³⁷ ₋₈₃	241 ⁺¹⁷⁴ ₋₁₀₀
2267	6.62 ± 1.13	290.99 ^{+0.06} _{-0.06}	293.09 ^{+0.06} _{-0.06}	246 ⁺²²⁵ ₋₉₃	302 ⁺⁴⁴⁶ ₋₉₃	273 ⁺¹⁹⁴ ₋₉₁	315 ⁺²⁵³ ₋₁₃₀
2268	2.38 ± 1.44	151.38 ^{+0.05} _{-0.05}	136.65 ^{+0.06} _{-0.06}	120 ⁺⁷⁹ ₋₅₄	147 ⁺¹⁴⁶ ₋₄₇	162 ⁺⁷⁴ ₋₇₀	148 ⁺⁹¹ ₋₆₅
2271	1.85 ± 0.75	128.88 ^{+0.07} _{-0.07}	113.24 ^{+0.08} _{-0.08}	99 ⁺⁶² ₋₄₆	124 ⁺¹⁰⁹ ₋₄₀	142 ⁺⁷² ₋₆₅	123 ⁺⁷² ₋₅₆
2273	22.00 ± 1.22	626.70 ^{+0.73} _{-0.73}	717.85 ^{+0.98} _{-0.98}	527 ⁺⁷¹⁷ ₋₁₆₆	683 ⁺¹³⁴⁶ ₋₂₂₂	492 ⁺⁵⁶³ ₋₁₃₇	711 ⁺⁷⁸⁰ ₋₃₁₄
2276	4.39 ± 0.42	223.83 ^{+0.03} _{-0.03}	215.74 ^{+0.04} _{-0.04}	185 ⁺¹⁴⁷ ₋₇₆	226 ⁺²⁸⁸ ₋₇₀	221 ⁺¹³¹ ₋₈₂	233 ⁺¹⁶⁶ ₋₉₇
2277	3.74 ± 0.76	202.06 ^{+0.03} _{-0.03}	191.44 ^{+0.04} _{-0.04}	166 ⁺¹²⁴ ₋₆₉	202 ⁺²⁴² ₋₆₃	204 ⁺¹¹² ₋₇₉	207 ⁺¹⁴¹ ₋₈₇
2279	13.80 ± 3.04	465.24 ^{+0.30} _{-0.30}	506.94 ^{+0.37} _{-0.37}	397 ⁺⁴⁶⁹ ₋₁₃₃	502 ⁺⁹⁰⁸ ₋₁₅₉	393 ⁺³⁸² ₋₁₁₄	526 ⁺⁵¹⁷ ₋₂₂₃
2283	174.00 [†]	2348.47 ^{+13.68} _{-13.61}	3356.97 ^{+23.52} _{-23.36}	1536 ⁺²⁴⁹⁶ ₋₅₄₄	2065 ⁺⁴²⁴³ ₋₈₂₇	1178 ⁺¹⁷⁷¹ ₋₄₃₀	2048 ⁺³²⁰⁸ ₋₁₀₃₃
2287*	3.00 ± 0.18	—	—	141 ⁺⁹⁹ ₋₆₁	173 ⁺¹⁸⁹ ₋₅₅	182 ⁺⁹² ₋₇₄	175 ⁺¹¹³ ₋₇₅
2288	12.10 ± 7.94	427.76 ^{+0.22} _{-0.22}	459.59 ^{+0.27} _{-0.27}	366 ⁺⁴¹⁴ ₋₁₂₅	460 ⁺⁸⁰⁵ ₋₁₄₄	369 ⁺³⁴⁰ ₋₁₀₉	481 ⁺⁴⁵⁷ ₋₂₀₂
2289	1.44 [†]	109.82 ^{+0.09} _{-0.09}	93.94 ^{+0.09} _{-0.09}	83 ⁺⁴⁹ ₋₄₀	105 ⁺⁸² ₋₃₅	125 ⁺⁵⁰ ₋₆₁	102 ⁺⁵⁹ ₋₄₈
2290	0.94 [†]	83.51 ^{+0.11} _{-0.11}	68.23 ^{+0.11} _{-0.11}	60 ⁺³⁵ ₋₃₀	80 ⁺⁵¹ ₋₂₇	101 ⁺³⁹ ₋₃₈	76 ⁺⁴⁵ ₋₃₈
2291	53.10 ± 51.90	1100.30 ^{+2.96} _{-2.95}	1385.06 ^{+4.44} _{-4.42}	861 ⁺¹³⁹⁸ ₋₂₆₆	1155 ⁺²⁴⁵⁴ ₋₄₀₉	733 ⁺¹⁰³⁴ ₋₂₁₇	1177 ⁺¹⁵²² ₋₅₆₆
2298	1.94 ± 0.38	132.85 ^{+0.07} _{-0.07}	117.33 ^{+0.07} _{-0.07}	103 ⁺⁶⁵ ₋₄₈	128 ⁺¹¹⁵ ₋₄₁	146 ⁺⁶³ ₋₆₆	127 ⁺⁷⁵ ₋₅₈
2304	2.18 ± 0.90	143.13 ^{+0.06} _{-0.06}	127.99 ^{+0.07} _{-0.07}	112 ⁺⁷² ₋₅₁	139 ⁺¹³² ₋₄₄	153 ⁺⁶⁹ ₋₆₂	138 ⁺⁸⁴ ₋₆₈
2306	10.10 ± 1.97	381.14 ^{+0.15} _{-0.15}	401.65 ^{+0.18} _{-0.18}	326 ⁺³⁴⁶ ₋₁₁₄	406 ⁺⁶⁷⁹ ₋₁₂₆	337 ⁺²⁸⁹ ₋₁₀₃	425 ⁺³⁸⁵ ₋₁₇₇

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
2309	10.90 ± 1.31	400.16 ^{+0.18} _{-0.18}	425.15 ^{+0.21} _{-0.21}	342 ⁺³⁷³ ₋₁₁₉	428 ⁺⁷³¹ ₋₁₃₄	350 ⁺³¹⁰ ₋₁₀₅	448 ⁺⁴¹⁴ ₋₁₈₇
2310	2.21 ± 1.72	144.38 ^{+0.06} _{-0.06}	129.30 ^{+0.06} _{-0.06}	113 ⁺⁷³ ₋₅₂	140 ⁺¹³⁴ ₋₄₅	156 ⁺⁷⁰ ₋₆₈	140 ⁺⁸⁵ ₋₆₂
2311	5.57 ± 2.44	260.60 ^{+0.04} _{-0.04}	257.66 ^{+0.04} _{-0.04}	219 ⁺¹⁸⁸ ₋₈₅	267 ⁺³⁷² ₋₈₃	250 ⁺¹⁶⁵ ₋₈₇	277 ⁺²¹² ₋₁₁₅
2312	29.10 ± 9.57	749.30 ^{+1.18} _{-1.18}	884.38 ^{+1.65} _{-1.64}	620 ⁺⁹⁰⁴ ₋₁₉₂	813 ⁺¹⁶⁶² ₋₂₇₁	561 ⁺⁶⁹⁵ ₋₁₅₆	842 ⁺⁹⁷⁹ ₋₃₈₃
2315	2.71 ± 0.33	164.48 ^{+0.05} _{-0.05}	150.55 ^{+0.05} _{-0.05}	131 ⁺⁸⁹ ₋₅₈	161 ⁺¹⁶⁹ ₋₅₁	173 ⁺⁸³ ₋₇₂	163 ⁺¹⁰² ₋₇₁
2316*	3.32 ± 0.10	—	—	152 ⁺¹¹⁰ ₋₆₅	186 ⁺²¹² ₋₅₈	192 ⁺¹⁰¹ ₋₈₁	189 ⁺¹²⁵ ₋₈₁
2317	1.31 ± 0.16	103.38 ^{+0.09} _{-0.09}	87.54 ^{+0.10} _{-0.10}	77 ⁺⁴⁶ ₋₃₇	99 ⁺⁷⁴ ₋₃₃	120 ⁺⁴⁷ ₋₄₆	96 ⁺⁵⁵ ₋₄₆
2320	7.21 ± 0.48	307.31 ^{+0.07} _{-0.07}	312.36 ^{+0.07} _{-0.07}	261 ⁺²⁴⁶ ₋₉₇	321 ⁺⁴⁸⁶ ₋₉₉	285 ⁺²¹¹ ₋₉₃	335 ⁺²⁷⁵ ₋₁₃₈
2321	2.76 ± 0.25	166.41 ^{+0.05} _{-0.05}	152.61 ^{+0.05} _{-0.05}	133 ⁺⁹¹ ₋₅₉	163 ⁺¹⁷² ₋₅₂	175 ⁺⁸⁵ ₋₇₂	165 ⁺¹⁰⁴ ₋₇₂
2324	2.79 ± 0.41	167.56 ^{+0.05} _{-0.05}	153.85 ^{+0.05} _{-0.05}	134 ⁺⁹² ₋₅₉	164 ⁺¹⁷⁴ ₋₅₂	175 ⁺⁸⁶ ₋₇₃	166 ⁺¹⁰⁵ ₋₇₂
2325	3.45 [†]	191.90 ^{+0.04} _{-0.04}	180.25 ^{+0.04} _{-0.04}	156 ⁺¹¹⁴ ₋₆₆	191 ⁺²²¹ ₋₆₀	196 ⁺¹⁰⁴ ₋₇₇	195 ⁺¹³⁰ ₋₈₃
2326	64.60 ± 26.10	1247.09 ^{+3.89} _{-3.88}	1603.15 ^{+5.98} _{-5.95}	952 ⁺¹⁵⁷⁹ ₋₂₉₉	1284 ⁺²⁷³⁴ ₋₄₆₅	797 ⁺¹¹⁵⁵ ₋₂₄₃	1301 ⁺¹⁷³⁷ ₋₆₃₆
2327	6.83 [†]	296.86 ^{+0.06} _{-0.06}	300.00 ^{+0.07} _{-0.07}	251 ⁺²³³ ₋₉₅	309 ⁺⁴⁶⁰ ₋₉₆	277 ⁺²⁰⁰ ₋₉₂	322 ⁺²⁶¹ ₋₁₃₃
2328	1.91 ± 0.36	131.54 ^{+0.07} _{-0.07}	115.97 ^{+0.07} _{-0.07}	102 ⁺⁶⁴ ₋₄₇	127 ⁺¹¹³ ₋₄₁	145 ⁺⁶² ₋₅₇	126 ⁺⁷⁴ ₋₅₇
2329	22.90 ± 0.13	642.96 ^{+0.79} _{-0.78}	739.64 ^{+1.06} _{-1.06}	540 ⁺⁷⁴² ₋₁₇₀	700 ⁺¹³⁸⁹ ₋₂₂₉	502 ⁺⁵⁸¹ ₋₁₃₉	729 ⁺⁸⁰⁶ ₋₃₂₄
2330	22.20 ± 1.87	630.34 ^{+0.74} _{-0.74}	722.71 ^{+1.00} _{-1.00}	530 ⁺⁷²² ₋₁₆₇	687 ⁺¹³⁵⁵ ₋₂₂₄	494 ⁺⁵⁶⁷ ₋₁₃₇	715 ⁺⁷⁸⁶ ₋₃₁₆
2332	18.30 ± 16.40	557.15 ^{+0.52} _{-0.52}	625.73 ^{+0.68} _{-0.68}	472 ⁺⁶⁰⁹ ₋₁₅₂	606 ⁺¹¹⁵⁹ ₋₁₉₅	451 ⁺⁸⁵ ₋₁₂₇	633 ⁺⁶⁶⁶ ₋₂₇₅
2340	2.59 ± 0.61	159.79 ^{+0.05} _{-0.05}	145.55 ^{+0.05} _{-0.05}	127 ⁺⁸⁵ ₋₅₇	156 ⁺¹⁶⁰ ₋₅₀	169 ⁺⁸⁰ ₋₆₉	157 ⁺⁹⁸ ₋₆₉
2344	20.20 ± 3.49	593.44 ^{+0.63} _{-0.63}	673.57 ^{+0.83} _{-0.83}	501 ⁺⁶⁶⁵ ₋₁₅₉	646 ⁺¹²⁵⁷ ₋₂₀₉	473 ⁺⁵²⁶ ₋₁₃₂	674 ⁺⁷²⁵ ₋₂₉₆
2345	5.47 ± 1.16	257.60 ^{+0.04} _{-0.04}	254.21 ^{+0.04} _{-0.04}	216 ⁺¹⁸⁵ ₋₈₅	264 ⁺³⁶⁵ ₋₈₂	248 ⁺¹⁶² ₋₈₇	274 ⁺²⁰⁸ ₋₁₁₃
2346	1.44 ± 0.30	109.82 ^{+0.09} _{-0.09}	93.94 ^{+0.09} _{-0.09}	83 ⁺⁴⁹ ₋₄₀	105 ⁺⁸² ₋₃₅	125 ⁺⁵⁰ ₋₄₈	102 ⁺⁵⁹ ₋₄₈
2347	3.50 ± 1.98	193.67 ^{+0.04} _{-0.04}	182.20 ^{+0.04} _{-0.04}	158 ⁺¹¹⁶ ₋₆₇	193 ⁺²²⁴ ₋₆₀	197 ⁺¹⁰⁶ ₋₇₇	197 ⁺¹³² ₋₈₃
2349	1.00 [†]	86.83 ^{+0.11} _{-0.11}	71.41 ^{+0.11} _{-0.11}	63 ⁺³⁷ ₋₃₁	83 ⁺⁵⁵ ₋₂₈	103 ⁺⁴⁰ ₋₅₅	79 ⁺⁴⁶ ₋₄₀
2352	3.89 ± 2.46	207.20 ^{+0.03} _{-0.03}	197.14 ^{+0.04} _{-0.04}	170 ⁺¹²⁹ ₋₇₁	207 ⁺²⁵² ₋₆₅	208 ⁺¹¹⁷ ₋₇₉	213 ⁺¹⁴⁷ ₋₉₀
2353	9.01 ± 2.43	354.32 ^{+0.11} _{-0.11}	368.85 ^{+0.13} _{-0.13}	302 ⁺³⁰⁹ ₋₁₀₈	375 ⁺⁶⁰⁸ ₋₁₁₆	319 ⁺²⁶⁰ ₋₉₉	392 ⁺³⁴⁴ ₋₁₆₃
2357	5.11 ± 1.44	246.64 ^{+0.04} _{-0.04}	241.62 ^{+0.04} _{-0.04}	206 ⁺¹⁷² ₋₈₂	252 ⁺³³⁹ ₋₇₈	239 ⁺¹⁵² ₋₈₅	260 ⁺¹⁹⁴ ₋₁₀₈
2358	12.00 [†]	425.50 ^{+0.22} _{-0.22}	456.75 ^{+0.27} _{-0.27}	364 ⁺⁴¹⁰ ₋₁₂₄	457 ⁺⁷⁹⁹ ₋₁₄₃	367 ⁺³³⁸ ₋₁₀₉	479 ⁺⁴⁵⁴ ₋₂₀₁
2360	4.61 ± 2.32	230.94 ^{+0.03} _{-0.03}	223.76 ^{+0.04} _{-0.04}	192 ⁺¹⁵⁴ ₋₇₈	234 ⁺³⁰⁴ ₋₇₃	227 ⁺¹³⁷ ₋₈₃	241 ⁺¹⁷⁴ ₋₁₀₀
2362	0.67 ± 0.53	67.23 ^{+0.12} _{-0.12}	52.97 ^{+0.12} _{-0.12}	47 ⁺²⁸ ₋₂₄	65 ⁺³⁶ ₋₂₃	86 ⁺³⁴ ₋₄₈	61 ⁺³⁸ ₋₃₂
2365	5.80 [†]	267.42 ^{+0.04} _{-0.04}	265.56 ^{+0.05} _{-0.05}	225 ⁺¹⁹⁶ ₋₈₇	275 ⁺³⁸⁸ ₋₈₅	255 ⁺¹⁷¹ ₋₈₈	286 ⁺²²¹ ₋₁₁₈
2367	2.54 ± 1.37	157.81 ^{+0.05} _{-0.05}	143.45 ^{+0.06} _{-0.06}	125 ⁺⁸⁴ ₋₅₆	154 ⁺¹⁵⁷ ₋₄₉	167 ⁺⁷⁹ ₋₇₁	155 ⁺⁹⁶ ₋₆₈
2368	10.10 ± 5.62	381.14 ^{+0.15} _{-0.15}	401.65 ^{+0.18} _{-0.18}	326 ⁺³⁴⁶ ₋₁₁₄	406 ⁺⁶⁷⁹ ₋₁₂₆	337 ⁺²⁸⁹ ₋₁₀₃	425 ⁺³⁸⁵ ₋₁₇₇
2371	3.91 ± 0.16	207.88 ^{+0.03} _{-0.03}	197.89 ^{+0.04} _{-0.04}	171 ⁺¹³⁰ ₋₇₁	208 ⁺²⁵⁴ ₋₆₅	209 ⁺¹¹⁷ ₋₉₀	214 ⁺¹⁴⁸ ₋₉₀
2372	9.82 ± 8.92	374.35 ^{+0.14} _{-0.14}	393.31 ^{+0.16} _{-0.16}	320 ⁺³³⁷ ₋₁₁₃	398 ⁺⁶⁶¹ ₋₁₂₄	333 ⁺²⁸² ₋₁₀₂	417 ⁺³⁷⁴ ₋₁₇₃
2373	1.51 ± 0.80	113.20 ^{+0.08} _{-0.08}	97.32 ^{+0.09} _{-0.09}	86 ⁺⁵¹ ₋₄₁	108 ⁺⁸⁷ ₋₃₆	128 ⁺⁵² ₋₆₂	106 ⁺⁶¹ ₋₅₀
2375	7.79 ± 1.52	322.88 ^{+0.08} _{-0.08}	330.92 ^{+0.09} _{-0.09}	275 ⁺²⁶⁶ ₋₁₀₁	339 ⁺⁵²⁶ ₋₁₀₅	296 ⁺²²⁷ ₋₉₅	354 ⁺²⁹⁸ ₋₁₄₆
2377	37.80 ± 3.51	885.57 ^{+1.79} _{-1.79}	1074.91 ^{+2.58} _{-2.57}	717 ⁺¹¹⁰⁵ ₋₂₂₀	952 ⁺¹⁹⁹⁰ ₋₃₂₆	631 ⁺⁸³⁵ ₋₁₇₉	979 ⁺¹¹⁹⁵ ₋₄₅₇
2380	4.82 ± 0.73	237.60 ^{+0.03} _{-0.03}	231.32 ^{+0.04} _{-0.04}	198 ⁺¹⁶² ₋₇₉	241 ⁺³¹⁹ ₋₇₅	232 ⁺¹⁴³ ₋₈₄	249 ⁺¹⁸³ ₋₁₀₄
2381	0.68 [†]	67.94 ^{+0.12} _{-0.12}	53.62 ^{+0.12} _{-0.12}	47 ⁺²⁸ ₋₂₄	66 ⁺³⁶ ₋₂₃	87 ⁺³⁴ ₋₄₉	62 ⁺³⁹ ₋₃₃
2382	12.50 [†]	436.74 ^{+0.24} _{-0.24}	470.88 ^{+0.30} _{-0.30}	373 ⁺⁴²⁷ ₋₁₂₇	470 ⁺⁸³⁰ ₋₁₄₈	375 ⁺³⁵⁰ ₋₁₁₀	492 ⁺⁴⁷² ₋₂₀₇
2383	19.50 ± 0.90	580.22 ^{+0.59} _{-0.59}	656.08 ^{+0.78} _{-0.77}	491 ⁺⁶⁴⁵ ₋₁₅₇	632 ⁺¹²²¹ ₋₂₀₄	465 ⁺⁵¹¹ ₋₁₃₀	659 ⁺⁷⁰⁴ ₋₂₈₈
2384	6.72 [†]	293.80 ^{+0.06} _{-0.06}	296.38 ^{+0.06} _{-0.06}	249 ⁺²²⁹ ₋₉₄	305 ⁺⁴⁵³ ₋₉₄	275 ⁺¹⁹⁷ ₋₉₁	318 ⁺²⁵⁷ ₋₁₃₁
2385	2.73 ± 1.48	165.25 ^{+0.05} _{-0.05}	151.38 ^{+0.05} _{-0.05}	132 ⁺¹⁷⁰ ₋₅₈	162 ⁺¹⁷⁰ ₋₅₁	174 ⁺⁷² ₋₇₁	163 ⁺¹⁰³ ₋₇₁
2387*	3.41 ± 0.13	—	—	155 ⁺¹¹³ ₋₆₆	189 ⁺²¹⁸ ₋₅₉	194 ⁺¹⁰³ ₋₇₇	193 ⁺¹²⁸ ₋₈₂
2389*	2.05 ± 0.07	—	—	107 ⁺⁶⁸ ₋₄₉	133 ⁺¹²³ ₋₄₃	150 ⁺⁶⁵ ₋₆₇	132 ⁺⁷⁹ ₋₅₉
2391	12.10 ± 3.41	427.76 ^{+0.22} _{-0.22}	459.59 ^{+0.27} _{-0.27}	366 ⁺⁴¹⁴ ₋₁₂₅	460 ⁺⁸⁰⁵ ₋₁₄₄	369 ⁺³⁴⁰ ₋₁₀₉	481 ⁺⁴⁵⁷ ₋₂₀₂
2392	1.29 ± 1.01	102.37 ^{+0.09} _{-0.09}	86.54 ^{+0.10} _{-0.10}	76 ⁺⁴⁵ ₋₃₇	98 ⁺⁷³ ₋₃₃	119 ⁺⁴⁶ ₋₅₉	95 ⁺⁵⁵ ₋₄₅
2393	1.03 ± 0.18	88.66 ^{+0.10} _{-0.10}	73.16 ^{+0.11} _{-0.11}	64 ⁺³⁸ ₋₃₂	85 ⁺⁵⁷ ₋₂₉	106 ⁺⁴⁰ ₋₅₅	81 ⁺⁴⁷ ₋₄₀
2394	2.50 ± 0.54	156.22 ^{+0.05} _{-0.05}	141.76 ^{+0.06} _{-0.06}	124 ⁺⁸² ₋₅₅	152 ⁺¹⁵⁴ ₋₄₈	166 ⁺⁷⁸ ₋₇₁	153 ⁺⁹⁵ ₋₆₇

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
2395	5.61 [†]	261.79 ^{+0.04} _{-0.04}	259.04 ^{+0.04} _{-0.04}	220 ⁺¹⁸⁹ ₋₈₆	269 ⁺³⁷⁵ ₋₈₃	251 ⁺¹⁶⁶ ₋₈₇	279 ⁺²¹³ ₋₁₁₅
2401	8.56 ± 8.46	342.91 ^{+0.10} _{-0.10}	355.02 ^{+0.12} _{-0.12}	292 ⁺²⁹³ ₋₁₀₆	362 ⁺⁵⁷⁸ ₋₁₁₂	311 ⁺²⁴⁸ ₋₉₈	378 ⁺³²⁷ ₋₁₅₇
2405	5.02 ± 2.56	243.85 ^{+0.04} _{-0.04}	238.44 ^{+0.04} _{-0.04}	204 ⁺¹⁶⁹ ₋₈₁	248 ⁺³³³ ₋₇₇	237 ⁺¹⁴⁹ ₋₈₅	257 ⁺¹⁹⁰ ₋₁₀₇
2408	4.08 ± 3.12	213.60 ^{+0.03} _{-0.03}	204.27 ^{+0.04} _{-0.04}	176 ⁺¹³⁶ ₋₇₃	215 ⁺²⁶⁶ ₋₆₇	213 ⁺¹²² ₋₈₀	220 ⁺¹⁵⁴ ₋₉₂
2412	174.00 ± 35.50	2348.47 ^{+13.68} _{-13.61}	3356.97 ^{+23.52} _{-23.36}	1536 ⁺²⁴⁹⁶ ₋₅₄₄	2065 ⁺⁴²⁴³ ₋₈₂₇	1178 ⁺¹⁷⁷¹ ₋₄₃₀	2048 ⁺³²⁰⁸ ₋₁₀₃₃
2419	7.41 ± 2.23	312.72 ^{+0.07} _{-0.07}	318.80 ^{+0.08} _{-0.08}	265 ⁺²⁵³ ₋₉₉	327 ⁺⁵⁰⁰ ₋₁₀₁	289 ⁺²¹⁶ ₋₉₄	341 ⁺²⁸³ ₋₁₄₁
2423	1.12 ± 0.75	93.53 ^{+0.10} _{-0.10}	77.88 ^{+0.10} _{-0.10}	69 ⁺⁴⁰ ₋₃₄	89 ⁺⁶² ₋₃₀	111 ⁺⁴² ₋₅₆	86 ⁺⁵⁰ ₋₄₂
2424	20.80 [†]	604.64 ^{+0.66} _{-0.66}	688.44 ^{+0.88} _{-0.88}	510 ⁺⁶⁸³ ₋₁₆₂	659 ⁺¹²⁸⁷ ₋₂₁₃	479 ⁺⁵³⁸ ₋₁₃₄	686 ⁺⁷⁴⁴ ₋₃₀₂
2428	7.24 ± 0.73	308.12 ^{+0.07} _{-0.07}	313.33 ^{+0.08} _{-0.08}	261 ⁺²⁴⁷ ₋₉₇	322 ⁺⁴⁸⁸ ₋₁₀₀	285 ⁺²¹² ₋₉₃	336 ⁺²⁷⁷ ₋₁₃₉
2429	2.75 ± 0.20	166.02 ^{+0.05} _{-0.05}	152.20 ^{+0.05} _{-0.05}	133 ⁺⁸⁸ ₋₅₈	163 ⁺¹⁷¹ ₋₅₂	174 ⁺⁸⁵ ₋₇₁	164 ⁺¹⁰⁴ ₋₇₁
2430	2.17 ± 0.84	142.71 ^{+0.06} _{-0.06}	127.55 ^{+0.07} _{-0.07}	112 ⁺⁷² ₋₅₁	138 ⁺¹³¹ ₋₄₄	154 ⁺⁶⁹ ₋₆₈	138 ⁺⁸³ ₋₆₂
2431*	4.05 ± 0.18	—	—	175 ⁺¹³⁵ ₋₇₂	213 ⁺²⁶⁴ ₋₆₇	212 ⁺¹²¹ ₋₈₀	219 ⁺¹⁵³ ₋₉₂
2432	3.74 ± 0.63	202.06 ^{+0.03} _{-0.03}	191.44 ^{+0.04} _{-0.04}	166 ⁺¹²⁴ ₋₆₉	202 ⁺²⁴² ₋₆₃	204 ⁺¹¹² ₋₇₉	207 ⁺¹⁴¹ ₋₈₇
2434	1.18 [†]	96.70 ^{+0.10} _{-0.10}	80.97 ^{+0.10} _{-0.10}	71 ⁺⁴² ₋₃₅	92 ⁺⁶⁶ ₋₃₁	114 ⁺⁴⁴ ₋₅₇	89 ⁺⁵¹ ₋₄₃
2435	1.52 ± 0.27	113.68 ^{+0.08} _{-0.08}	97.80 ^{+0.09} _{-0.09}	86 ⁺⁵² ₋₄₁	109 ⁺⁸⁸ ₋₃₆	129 ⁺⁶² ₋₆₂	106 ⁺⁶² ₋₅₀
2436	7.30 ± 0.39	309.75 ^{+0.07} _{-0.07}	315.26 ^{+0.08} _{-0.08}	263 ⁺²⁴⁹ ₋₉₈	324 ⁺⁴⁹³ ₋₁₀₀	287 ⁺²¹³ ₋₉₄	338 ⁺²⁷⁹ ₋₁₃₉
2437	3.41 ± 2.47	190.48 ^{+0.04} _{-0.04}	178.69 ^{+0.04} _{-0.04}	155 ⁺¹¹³ ₋₆₆	189 ⁺²¹⁸ ₋₅₉	194 ⁺¹⁰³ ₋₇₇	193 ⁺¹²⁸ ₋₈₂
2438	0.81 ± 0.47	75.74 ^{+0.12} _{-0.12}	60.88 ^{+0.12} _{-0.12}	54 ⁺³² ₋₂₇	73 ⁺⁴³ ₋₂₅	94 ⁺³⁶ ₋₃₅	69 ⁺⁴² ₋₃₅
2440	1.24 ± 0.50	99.82 ^{+0.09} _{-0.09}	84.02 ^{+0.10} _{-0.10}	74 ⁺⁴⁴ ₋₃₆	95 ⁺⁷⁰ ₋₃₂	116 ⁺⁴⁵ ₋₅₈	92 ⁺⁵³ ₋₄₅
2441	6.84 ± 2.04	297.14 ^{+0.06} _{-0.06}	300.32 ^{+0.07} _{-0.07}	252 ⁺²³³ ₋₉₅	309 ⁺⁴⁶¹ ₋₉₆	277 ⁺²⁰¹ ₋₉₂	322 ⁺²⁶¹ ₋₁₃₃
2442	0.98 [†]	85.83 ^{+0.11} _{-0.11}	70.44 ^{+0.11} _{-0.11}	62 ⁺³⁶ ₋₃₁	82 ⁺⁵⁴ ₋₂₈	104 ⁺³⁹ ₋₅₄	78 ⁺⁴⁶ ₋₃₉
2443	5.78 ± 0.65	266.83 ^{+0.04} _{-0.04}	264.88 ^{+0.05} _{-0.05}	224 ⁺¹⁹⁵ ₋₈₇	274 ⁺³⁸⁷ ₋₈₅	255 ⁺¹⁷¹ ₋₁₁₈	285 ⁺²²⁰ ₋₁₈₉
2446	4.99 ± 0.39	242.92 ^{+0.04} _{-0.04}	237.37 ^{+0.04} _{-0.04}	203 ⁺¹⁶⁸ ₋₈₁	247 ⁺³³¹ ₋₇₇	236 ⁺¹⁴⁸ ₋₈₅	256 ⁺¹⁸⁹ ₋₁₀₆
2447	1.71 ± 0.90	122.56 ^{+0.07} _{-0.07}	106.79 ^{+0.08} _{-0.08}	94 ⁺⁵⁷ ₋₄₄	118 ⁺¹⁰⁰ ₋₃₈	137 ⁺⁵⁷ ₋₆₄	116 ⁺⁶⁸ ₋₅₃
2448	42.50 ± 13.30	954.41 ^{+2.14} _{-2.13}	1173.10 ^{+3.12} _{-3.11}	765 ⁺¹²⁰² ₋₂₃₅	1019 ⁺²¹⁴⁶ ₋₃₅₃	665 ⁺⁹⁰¹ ₋₁₉₁	1045 ⁺¹³⁰¹ ₋₄₉₃
2449	37.90 ± 19.60	887.07 ^{+1.80} _{-1.79}	1077.03 ^{+2.59} _{-2.58}	718 ⁺¹¹⁰⁷ ₋₂₂₀	953 ⁺¹⁹⁹⁴ ₋₃₂₆	632 ⁺⁸³⁶ ₋₁₇₉	980 ⁺¹¹⁹⁷ ₋₄₅₈
2450*	3.38 ± 0.20	—	—	154 ⁺¹¹² ₋₆₆	188 ⁺²¹⁶ ₋₅₉	194 ⁺¹⁰² ₋₇₇	192 ⁺¹²⁷ ₋₈₂
2451	1.31 ± 0.20	103.38 ^{+0.09} _{-0.09}	87.54 ^{+0.10} _{-0.10}	77 ⁺⁴⁶ ₋₃₇	99 ⁺⁷⁴ ₋₃₃	120 ⁺⁴⁷ ₋₅₉	96 ⁺⁵⁵ ₋₄₆
2452	0.99 ± 0.24	86.22 ^{+0.11} _{-0.11}	70.82 ^{+0.11} _{-0.11}	62 ⁺³⁷ ₋₃₁	82 ⁺⁵⁴ ₋₂₈	104 ⁺⁴⁰ ₋₅₄	79 ⁺⁴⁶ ₋₃₉
2453	0.60 [†]	62.51 ^{+0.13} _{-0.13}	48.65 ^{+0.12} _{-0.12}	43 ⁺²⁶ ₋₂₂	61 ⁺³² ₋₂₂	82 ⁺³⁷ ₋₃₁	57 ⁺³¹ ₋₃₁
2454	7.21 ± 5.21	307.31 ^{+0.07} _{-0.07}	312.36 ^{+0.07} _{-0.07}	261 ⁺²⁴⁶ ₋₉₇	321 ⁺⁴⁸⁶ ₋₉₉	285 ⁺²¹¹ ₋₉₃	335 ⁺²⁷⁵ ₋₁₃₈
2458	1.35 ± 0.81	105.38 ^{+0.09} _{-0.09}	89.52 ^{+0.09} _{-0.09}	79 ⁺⁴⁷ ₋₃₈	101 ⁺⁷⁷ ₋₃₃	121 ⁺⁴⁸ ₋₆₀	98 ⁺⁵⁶ ₋₄₇
2460	0.70 [†]	69.46 ^{+0.12} _{-0.12}	55.03 ^{+0.12} _{-0.12}	49 ⁺²⁹ ₋₂₅	67 ⁺³⁸ ₋₂₃	88 ⁺³⁴ ₋₄₉	63 ⁺³⁹ ₋₃₃
2463	2.82 [†]	168.71 ^{+0.05} _{-0.05}	155.08 ^{+0.05} _{-0.05}	135 ⁺⁹³ ₋₅₉	166 ⁺¹⁷⁶ ₋₅₂	176 ⁺⁸⁶ ₋₇₃	167 ⁺¹⁰⁷ ₋₇₂
2464	0.51 [†]	56.87 ^{+0.13} _{-0.13}	43.56 ^{+0.13} _{-0.13}	39 ⁺²⁴ ₋₂₀	56 ⁺²⁷ ₋₂₀	76 ⁺³¹ ₋₂₈	52 ⁺³⁶ ₋₂₈
2472	3.79 ± 1.45	203.78 ^{+0.03} _{-0.03}	193.34 ^{+0.04} _{-0.04}	167 ⁺¹²⁶ ₋₇₀	204 ⁺²⁴⁵ ₋₆₄	205 ⁺¹¹⁴ ₋₇₉	209 ⁺¹⁴³ ₋₈₈
2476	0.85 ± 0.09	78.42 ^{+0.11} _{-0.11}	63.40 ^{+0.11} _{-0.11}	56 ⁺³³ ₋₂₈	75 ⁺⁴⁶ ₋₂₆	97 ⁺³⁷ ₋₅₂	71 ⁺⁴³ ₋₃₆
2477	1.90 ± 0.39	131.10 ^{+0.07} _{-0.07}	115.52 ^{+0.07} _{-0.07}	101 ⁺⁶³ ₋₄₇	126 ⁺¹¹³ ₋₄₁	144 ⁺⁶¹ ₋₆₆	125 ⁺⁷⁴ ₋₅₇
2482	1.12 ± 0.26	93.53 ^{+0.10} _{-0.10}	77.88 ^{+0.10} _{-0.10}	69 ⁺⁴⁰ ₋₃₄	89 ⁺⁶² ₋₃₀	111 ⁺⁴² ₋₅₆	86 ⁺⁵⁰ ₋₄₂
2484	2.20 ± 0.51	143.97 ^{+0.06} _{-0.06}	128.86 ^{+0.06} _{-0.06}	113 ⁺⁷³ ₋₅₁	139 ⁺¹³³ ₋₄₅	155 ⁺⁶⁹ ₋₆₈	139 ⁺⁸⁴ ₋₆₂
2485	1.92 [†]	131.98 ^{+0.07} _{-0.07}	116.42 ^{+0.07} _{-0.07}	102 ⁺⁶⁴ ₋₄₇	127 ⁺¹¹⁴ ₋₄₁	145 ⁺⁶² ₋₆₆	126 ⁺⁷⁵ ₋₅₇
2487	26.60 ± 9.40	707.51 ^{+1.02} _{-1.02}	827.07 ^{+1.40} _{-1.40}	589 ⁺⁸⁴⁰ ₋₁₈₃	770 ⁺¹⁵⁵⁶ ₋₂₅₅	538 ⁺⁶⁵¹ ₋₁₄₉	798 ⁺⁹¹¹ ₋₃₆₀
2495	9.53 ± 1.58	367.25 ^{+0.13} _{-0.13}	384.62 ^{+0.15} _{-0.15}	314 ⁺³²⁷ ₋₁₂₁	390 ⁺⁴²² ₋₁₀₁	328 ⁺²⁷⁴ ₋₁₇₀	408 ⁺³⁶⁴ ₋₁₇₀
2496	3.01 [†]	175.89 ^{+0.04} _{-0.04}	162.81 ^{+0.05} _{-0.05}	142 ⁺⁹⁹ ₋₆₂	173 ⁺¹⁹⁰ ₋₅₅	182 ⁺⁹² ₋₇₄	176 ⁺¹¹⁴ ₋₇₆
2500	3.48 ± 0.44	192.97 ^{+0.04} _{-0.04}	181.42 ^{+0.04} _{-0.04}	157 ⁺¹¹⁵ ₋₆₇	192 ⁺²²³ ₋₆₀	196 ⁺¹⁰⁵ ₋₈₃	196 ⁺¹³¹ ₋₈₃
2502	33.20 ± 8.53	815.13 ^{+1.46} _{-1.46}	975.75 ^{+2.07} _{-2.07}	668 ⁺¹⁰⁰² ₋₂₀₅	881 ⁺¹⁸²⁴ ₋₂₉₈	596 ⁺⁷⁶⁴ ₋₁₆₇	909 ⁺¹⁰⁸⁴ ₋₄₁₉
2504	12.80 [†]	443.41 ^{+0.25} _{-0.25}	479.28 ^{+0.31} _{-0.31}	379 ⁺⁴³⁷ ₋₁₂₈	477 ⁺⁸⁴⁸ ₋₁₅₀	379 ⁺³⁵⁸ ₋₁₁₁	500 ⁺⁴⁸² ₋₂₁₁
2505	1.69 ± 0.58	121.65 ^{+0.08} _{-0.08}	105.85 ^{+0.08} _{-0.08}	93 ⁺⁵⁷ ₋₄₄	117 ⁺⁹⁹ ₋₃₈	136 ⁺⁵⁶ ₋₆₄	115 ⁺⁶⁷ ₋₅₃
2508	39.20 ± 15.40	906.38 ^{+1.89} _{-1.89}	1104.47 ^{+2.74} _{-2.73}	732 ⁺¹¹³⁴ ₋₂₂₅	972 ⁺²⁰³⁸ ₋₃₃₄	642 ⁺⁸⁵⁵ ₋₁₈₂	999 ⁺¹²²⁷ ₋₄₆₈

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
2509	12.10 ± 1.74	427.76 ^{+0.22} _{-0.22}	459.59 ^{+0.27} _{-0.27}	366 ⁺⁴¹⁴ ₋₁₂₅	460 ⁺⁸⁰⁵ ₋₁₄₄	369 ⁺³⁴⁰ ₋₁₀₉	481 ⁺⁴⁵⁷ ₋₂₀₂
2510	2.45 ± 0.85	154.21 ^{+0.05} _{-0.05}	139.64 ^{+0.06} _{-0.06}	122 ⁺⁸¹ ₋₅₅	150 ⁺¹⁵⁰ ₋₄₈	164 ⁺⁷⁶ ₋₇₀	151 ⁺⁹³ ₋₆₆
2511	0.82 ± 0.52	76.70 ^{+0.12} _{-0.12}	61.78 ^{+0.12} _{-0.12}	55 ⁺³² ₋₂₈	74 ⁺⁴⁴ ₋₂₅	95 ⁺³⁶ ₋₅₁	70 ⁺⁴² ₋₃₆
2512	5.72 ± 1.92	265.06 ^{+0.04} _{-0.04}	262.82 ^{+0.05} _{-0.05}	223 ⁺¹⁹³ ₋₈₇	272 ⁺³⁸² ₋₈₄	253 ⁺¹⁶⁹ ₋₈₈	283 ⁺²¹⁸ ₋₁₁₇
2513	17.80 ± 13.40	547.38 ^{+0.49} _{-0.49}	612.93 ^{+0.64} _{-0.64}	465 ⁺⁵⁹⁴ ₋₁₅₀	595 ⁺¹¹³² ₋₁₉₁	445 ⁺⁴⁷⁴ ₋₁₂₅	622 ⁺⁶⁵⁰ ₋₂₇₀
2514*	9.76 ± 0.52	—	—	318 ⁺³³⁵ ₋₁₁₃	396 ⁺⁶⁵⁷ ₋₁₂₃	332 ⁺²⁸⁰ ₋₁₀₂	415 ⁺³⁷² ₋₁₇₃
2515	1.99 ± 1.47	135.03 ^{+0.07} _{-0.07}	119.57 ^{+0.07} _{-0.07}	105 ⁺⁶⁶ ₋₄₈	130 ⁺¹¹⁹ ₋₄₂	148 ⁺⁶⁴ ₋₆₆	129 ⁺⁷⁷ ₋₅₈
2519	1.69 ± 0.42	121.65 ^{+0.08} _{-0.08}	105.85 ^{+0.08} _{-0.08}	93 ⁺⁵⁷ ₋₄₄	117 ⁺⁹⁹ ₋₃₈	136 ⁺⁵⁶ ₋₆₄	115 ⁺⁶⁷ ₋₅₃
2522*	3.66 ± 0.25	—	—	163 ⁺¹²¹ ₋₆₉	199 ⁺²³⁶ ₋₇₂	202 ⁺¹¹⁰ ₋₇₈	203 ⁺¹³⁸ ₋₈₆
2523	21.30 ± 3.64	613.89 ^{+0.69} _{-0.69}	700.74 ^{+0.92} _{-0.92}	517 ⁺⁶⁹⁷ ₋₁₆₄	669 ⁺¹³¹² ₋₂₁₇	485 ⁺⁷⁵⁹ ₋₁₃₅	697 ⁺⁷⁵⁹ ₋₃₀₇
2528	0.67 [†]	67.30 ^{+0.12} _{-0.12}	53.03 ^{+0.12} _{-0.12}	47 ⁺²⁸ ₋₂₄	65 ⁺³⁶ ₋₂₃	86 ⁺³⁴ ₋₄₈	61 ⁺³⁹ ₋₃₂
2529	1.77 [†]	125.29 ^{+0.07} _{-0.07}	109.57 ^{+0.08} _{-0.08}	96 ⁺⁵⁹ ₋₄₅	120 ⁺¹⁰⁴ ₋₃₉	139 ⁺⁵⁸ ₋₆₄	119 ⁺⁷⁰ ₋₅₄
2530	1.18 ± 0.09	96.70 ^{+0.10} _{-0.10}	80.97 ^{+0.10} _{-0.10}	71 ⁺⁴² ₋₃₅	92 ⁺⁶⁶ ₋₃₁	114 ⁺⁴⁴ ₋₅₇	89 ⁺⁵¹ ₋₄₃
2533*	12.70 ± 0.12	—	—	377 ⁺⁴³³ ₋₁₂₈	475 ⁺⁸⁴² ₋₁₄₉	378 ⁺³⁵⁵ ₋₁₁₁	497 ⁺⁴⁷⁹ ₋₂₁₀
2536	21.60 ± 13.40	619.40 ^{+0.71} _{-0.71}	708.09 ^{+0.95} _{-0.95}	522 ⁺⁷⁰⁵ ₋₁₆₅	675 ⁺¹³²⁶ ₋₂₁₉	488 ⁺⁵⁵⁵ ₋₁₃₆	703 ⁺⁷⁶⁸ ₋₃₁₀
2537*	1.35 ± 0.05	—	—	79 ⁺⁴⁷ ₋₃₈	101 ⁺⁷⁷ ₋₆₀	121 ⁺⁴⁸ ₋₄₇	98 ⁺⁵⁶ ₋₄₇
2541	3.59 ± 1.39	196.84 ^{+0.04} _{-0.04}	185.68 ^{+0.04} _{-0.04}	161 ⁺¹¹⁹ ₋₆₈	196 ⁺²³¹ ₋₆₁	200 ⁺¹⁰⁸ ₋₇₈	200 ⁺¹³⁵ ₋₈₅
2551	6.69 ± 5.70	292.96 ^{+0.06} _{-0.06}	295.40 ^{+0.06} _{-0.06}	248 ⁺²²⁸ ₋₉₄	304 ⁺⁴⁵⁰ ₋₉₄	274 ⁺¹⁹⁶ ₋₉₁	317 ⁺²⁵⁵ ₋₁₃₁
2560	11.30 ± 2.35	409.48 ^{+0.19} _{-0.19}	436.73 ^{+0.23} _{-0.23}	350 ⁺³⁸⁷ ₋₁₂₁	439 ⁺⁷⁵⁶ ₋₁₃₇	357 ⁺³²⁰ ₋₁₀₆	459 ⁺⁴²⁹ ₋₁₉₂
2564	14.40 ± 14.00	478.06 ^{+0.32} _{-0.32}	523.29 ^{+0.41} _{-0.41}	408 ⁺⁴⁸⁹ ₋₁₃₅	517 ⁺⁹⁴³ ₋₁₆₄	402 ⁺³⁹⁶ ₋₁₁₆	541 ⁺⁵³⁸ ₋₂₃₀
2569	2.91 ± 2.12	172.13 ^{+0.04} _{-0.04}	158.76 ^{+0.05} _{-0.05}	138 ⁺⁹⁶ ₋₆₀	169 ⁺¹⁸³ ₋₅₃	179 ⁺⁸⁹ ₋₇₄	171 ⁺¹¹⁰ ₋₇₄
2570	6.43 ± 0.59	285.63 ^{+0.05} _{-0.05}	286.79 ^{+0.06} _{-0.06}	241 ⁺²¹⁸ ₋₉₂	296 ⁺⁴³² ₋₉₀	269 ⁺¹⁸⁹ ₋₉₀	308 ⁺²⁴⁵ ₋₁₂₇
2571	15.50 ± 0.38	501.08 ^{+0.38} _{-0.38}	552.83 ^{+0.48} _{-0.48}	427 ⁺¹⁴⁰ ₋₁₄₀	543 ⁺¹⁷³ ₋₁₇₃	416 ⁺¹¹⁹ ₋₁₁₉	568 ⁺²⁴³ ₋₂₄₃
2581	4.26 ± 0.82	219.58 ^{+0.03} _{-0.03}	210.96 ^{+0.04} _{-0.04}	181 ⁺¹⁴² ₋₇₄	221 ⁺²⁷⁹ ₋₆₉	218 ⁺¹²⁷ ₋₈₁	228 ⁺¹⁶¹ ₋₉₅
2583	22.40 ± 6.10	633.96 ^{+0.75} _{-0.75}	727.56 ^{+1.02} _{-1.01}	533 ⁺⁷²⁸ ₋₁₆₈	691 ⁺¹³⁶⁵ ₋₂₂₅	497 ⁺⁵⁷¹ ₋₁₃₈	719 ⁺⁷⁹² ₋₃₁₈
2585	0.85 [†]	78.30 ^{+0.11} _{-0.11}	63.29 ^{+0.11} _{-0.11}	56 ⁺³³ ₋₂₈	75 ⁺⁴⁶ ₋₂₆	97 ⁺³⁷ ₋₅₂	71 ⁺⁴³ ₋₃₆
2586	4.86 ± 0.29	238.86 ^{+0.03} _{-0.03}	232.75 ^{+0.04} _{-0.04}	199 ⁺¹⁶³ ₋₈₀	243 ⁺³²² ₋₇₅	233 ⁺¹⁴⁵ ₋₈₄	251 ⁺¹⁸⁴ ₋₁₀₄
2589	3.12 ± 2.26	179.96 ^{+0.04} _{-0.04}	167.23 ^{+0.04} _{-0.04}	145 ⁺¹⁰³ ₋₆₃	178 ⁺¹⁹⁸ ₋₅₆	186 ⁺⁹⁵ ₋₇₇	181 ⁺¹¹⁸ ₋₇₆
2593	1.95 ± 0.77	133.29 ^{+0.07} _{-0.07}	117.78 ^{+0.07} _{-0.07}	103 ⁺⁶⁵ ₋₄₈	128 ⁺¹¹⁶ ₋₅₆	146 ⁺⁶³ ₋₅₈	128 ⁺⁷⁶ ₋₅₈
2597	9.36 ± 8.35	363.05 ^{+0.12} _{-0.12}	379.49 ^{+0.15} _{-0.15}	310 ⁺³²¹ ₋₁₁₀	385 ⁺⁶³¹ ₋₁₂₀	325 ⁺²⁶⁹ ₋₁₀₀	403 ⁺³⁵⁷ ₋₁₆₇
2599	114.00 ± 47.70	1792.55 ^{+8.18} _{-8.15}	2448.87 ^{+13.41} _{-13.34}	1260 ⁺²¹²⁰ ₋₄₂₁	1706 ⁺³⁵⁸⁰ ₋₆₅₆	1003 ⁺¹⁵¹⁵ ₋₃₄₀	1704 ⁺²⁴⁸⁸ ₋₈₅₇
2600	1.13 ± 0.25	94.06 ^{+0.10} _{-0.10}	78.40 ^{+0.10} _{-0.10}	69 ⁺⁴⁰ ₋₃₄	90 ⁺⁶³ ₋₃₀	111 ⁺⁴³ ₋₄₂	86 ⁺⁵⁰ ₋₄₂
2603	1.07 ± 0.17	90.84 ^{+0.10} _{-0.10}	75.27 ^{+0.11} _{-0.10}	66 ⁺³⁹ ₋₃₃	87 ⁺⁵⁹ ₋₂₉	108 ⁺⁴¹ ₋₄₁	83 ⁺⁴⁸ ₋₄₁
2606*	8.96 ± 0.24	—	—	301 ⁺³⁰⁷ ₋₁₀₈	373 ⁺⁶⁰⁵ ₋₁₁₆	318 ⁺²⁵⁹ ₋₉₉	391 ⁺³⁴² ₋₁₆₂
2608	0.68 [†]	67.68 ^{+0.12} _{-0.12}	53.38 ^{+0.12} _{-0.12}	47 ⁺²⁸ ₋₂₄	66 ⁺³⁶ ₋₂₃	87 ⁺³⁴ ₋₄₈	61 ⁺³⁹ ₋₃₂
2610	19.70 ± 3.82	584.02 ^{+0.60} _{-0.60}	661.09 ^{+0.79} _{-0.79}	494 ⁺⁶⁵¹ ₋₁₅₇	636 ⁺¹²³² ₋₂₀₅	467 ⁺⁵¹⁵ ₋₁₃₁	663 ⁺⁷¹⁰ ₋₂₉₀
2611*	10.70 ± 0.34	—	—	338 ⁺³⁶⁷ ₋₁₁₈	422 ⁺⁷¹⁸ ₋₁₃₂	347 ⁺³⁰⁵ ₋₁₀₅	442 ⁺⁴⁰⁷ ₋₁₈₅
2614	27.80 ± 2.18	727.74 ^{+1.09} _{-1.09}	854.74 ^{+1.52} _{-1.51}	604 ⁺⁸⁷¹ ₋₁₈₇	791 ⁺¹⁶⁰⁸ ₋₂₆₃	549 ⁺⁶⁷³ ₋₁₅₃	820 ⁺⁹⁴⁴ ₋₃₇₁
2615	20.90 ± 9.56	606.50 ^{+0.67} _{-0.67}	690.91 ^{+0.89} _{-0.89}	512 ⁺⁶⁸⁵ ₋₁₆₂	661 ⁺¹²⁹² ₋₂₁₄	481 ⁺⁵⁴⁰ ₋₁₃₄	688 ⁺⁷⁴⁷ ₋₃₀₃
2619	4.85 ± 0.42	238.55 ^{+0.03} _{-0.03}	232.39 ^{+0.04} _{-0.04}	199 ⁺¹⁶³ ₋₈₀	242 ⁺³²¹ ₋₇₅	233 ⁺¹⁴⁴ ₋₈₄	251 ⁺¹⁸⁴ ₋₁₀₄
2620	1.06 ± 0.52	90.30 ^{+0.10} _{-0.10}	74.75 ^{+0.11} _{-0.11}	66 ⁺³⁹ ₋₃₃	86 ⁺⁵⁸ ₋₂₉	108 ⁺⁴¹ ₋₅₆	83 ⁺⁴⁸ ₋₄₁
2623	4.55 ± 1.68	229.01 ^{+0.03} _{-0.03}	221.58 ^{+0.04} _{-0.04}	190 ⁺¹⁵² ₋₇₇	232 ⁺²⁹⁹ ₋₇₂	225 ⁺¹³⁶ ₋₈₂	239 ⁺¹⁷² ₋₁₀₀
2628	2.49 ± 0.18	155.82 ^{+0.05} _{-0.05}	141.33 ^{+0.06} _{-0.06}	124 ⁺⁸² ₋₅₅	152 ⁺¹⁵³ ₋₄₈	166 ⁺⁷¹ ₋₇₁	153 ⁺⁹⁵ ₋₆₇
2632	3.02 ± 2.25	176.26 ^{+0.04} _{-0.04}	163.21 ^{+0.05} _{-0.05}	142 ⁺¹⁰⁰ ₋₆₂	174 ⁺¹⁹⁰ ₋₅₅	183 ⁺⁹² ₋₇₄	176 ⁺¹¹⁴ ₋₇₆
2633	6.07 [†]	275.31 ^{+0.05} _{-0.05}	274.73 ^{+0.05} _{-0.05}	232 ⁺²⁰⁶ ₋₈₉	284 ⁺⁴⁰⁷ ₋₈₈	261 ⁺¹⁷⁹ ₋₈₉	295 ⁺²³¹ ₋₁₂₂
2634	3.31 ± 0.85	186.89 ^{+0.04} _{-0.04}	174.77 ^{+0.04} _{-0.04}	152 ⁺¹⁰⁹ ₋₆₅	185 ⁺²¹¹ ₋₅₈	192 ⁺¹⁰⁰ ₋₇₆	189 ⁺¹²⁵ ₋₈₀
2636	0.94 ± 0.63	83.46 ^{+0.11} _{-0.11}	68.18 ^{+0.11} _{-0.11}	60 ⁺³⁵ ₋₃₀	80 ⁺⁵¹ ₋₂₇	101 ⁺³⁹ ₋₃₈	76 ⁺⁴⁵ ₋₃₈
2640	5.22 ± 1.90	250.02 ^{+0.04} _{-0.04}	245.49 ^{+0.04} _{-0.04}	209 ⁺¹⁷⁶ ₋₈₃	255 ⁺³⁴⁷ ₋₇₉	242 ⁺¹⁵⁵ ₋₈₆	264 ⁺¹⁹⁸ ₋₁₁₀
2641	4.26 ± 2.53	219.58 ^{+0.03} _{-0.03}	210.96 ^{+0.04} _{-0.04}	181 ⁺¹⁴² ₋₇₄	221 ⁺²⁷⁹ ₋₆₉	218 ⁺¹²⁷ ₋₈₁	228 ⁺¹⁶¹ ₋₉₅

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
2649	5.28 ± 3.50	251.85 ^{+0.04} _{-0.04}	247.59 ^{+0.04} _{-0.04}	211 ⁺¹⁷⁸ ₋₈₃	257 ⁺³⁵¹ ₋₈₀	243 ⁺¹⁵⁷ ₋₈₆	267 ⁺²⁰¹ ₋₁₁₀
2660	0.71 ± 0.31	70.16 ^{+0.12} _{-0.12}	55.67 ^{+0.12} _{-0.12}	49 ⁺²⁹ ₋₂₅	68 ⁺³⁸ ₋₂₄	89 ⁺³⁴ ₋₄₉	64 ⁺³⁹ ₋₃₃
2662	3.15 ± 0.73	181.07 ^{+0.04} _{-0.04}	168.43 ^{+0.04} _{-0.04}	146 ⁺¹⁰⁴ ₋₆₃	179 ⁺²⁰⁰ ₋₅₆	187 ⁺⁹⁶ ₋₇₅	182 ⁺¹¹⁹ ₋₇₈
2663	1.22 ± 0.65	98.78 ^{+0.10} _{-0.10}	83.01 ^{+0.10} _{-0.10}	73 ⁺⁴³ ₋₃₆	94 ⁺⁶⁸ ₋₃₂	116 ⁺⁴⁵ ₋₅₈	91 ⁺⁵³ ₋₄₄
2664	3.85 ± 1.50	205.83 ^{+0.03} _{-0.03}	195.62 ^{+0.04} _{-0.04}	169 ⁺¹²⁸ ₋₇₀	206 ⁺²⁴⁹ ₋₇₉	207 ⁺¹¹⁶ ₋₇₉	211 ⁺¹⁴⁵ ₋₈₉
2665	2.84 ± 0.75	169.47 ^{+0.04} _{-0.04}	155.90 ^{+0.05} _{-0.05}	136 ⁺⁹⁴ ₋₆₀	166 ⁺¹⁷⁸ ₋₅₃	177 ⁺⁸⁷ ₋₇₃	168 ⁺¹⁰⁷ ₋₇₃
2671	0.42 [†]	50.06 ^{+0.14} _{-0.14}	37.54 ^{+0.13} _{-0.13}	34 ⁺²² ₋₁₈	51 ⁺²³ ₋₁₈	70 ⁺³⁰ ₋₄₂	46 ⁺³⁴ ₋₂₆
2677	5.85 ± 3.24	268.89 ^{+0.04} _{-0.04}	267.27 ^{+0.05} _{-0.05}	226 ⁺¹⁹⁸ ₋₈₈	277 ⁺³⁹² ₋₈₆	256 ⁺¹⁷³ ₋₈₈	288 ⁺²²³ ₋₁₁₉
2679*	139.00 ± 5.30	—	—	1384 ⁺²³⁰² ₋₄₇₆	1870 ⁺³⁸⁸⁵ ₋₇₃₃	1083 ⁺¹⁶³⁸ ₋₃₈₁	1860 ⁺²⁸⁰⁵ ₋₉₃₉
2680	12.10 ± 7.54	427.76 ^{+0.22} _{-0.22}	459.59 ^{+0.27} _{-0.27}	366 ⁺⁴¹⁴ ₋₁₂₅	460 ⁺⁸⁰⁵ ₋₁₄₄	369 ⁺³⁴⁰ ₋₁₀₉	481 ⁺⁴⁵⁷ ₋₂₀₂
2681	2.84 ± 0.31	169.47 ^{+0.04} _{-0.04}	155.90 ^{+0.05} _{-0.05}	136 ⁺⁹⁴ ₋₆₀	166 ⁺¹⁷⁸ ₋₅₃	177 ⁺⁸⁷ ₋₇₃	168 ⁺¹⁰⁷ ₋₇₃
2688	2.58 ± 0.61	159.39 ^{+0.05} _{-0.05}	145.13 ^{+0.05} _{-0.05}	127 ⁺⁸⁵ ₋₅₆	156 ⁺¹⁶⁰ ₋₄₉	169 ⁺⁸⁰ ₋₇₁	157 ⁺⁹⁸ ₋₆₉
2690	28.90 ± 12.30	746.01 ^{+1.17} _{-1.17}	879.84 ^{+1.63} _{-1.62}	618 ⁺⁸⁹⁹ ₋₁₉₁	810 ⁺¹⁶⁵⁴ ₋₂₇₀	559 ⁺⁶⁹² ₋₁₅₆	839 ⁺⁹⁷³ ₋₃₈₁
2691	66.80 ± 13.10	1274.06 ^{+4.08} _{-4.06}	1643.70 ^{+6.28} _{-6.26}	969 ⁺¹⁶¹⁰ ₋₃₀₅	1307 ⁺²⁷⁸³ ₋₄₇₅	808 ⁺¹¹⁷⁷ ₋₂₄₈	1323 ⁺¹⁷⁷⁶ ₋₆₄₈
2693	5.78 [†]	266.83 ^{+0.04} _{-0.04}	264.88 ^{+0.05} _{-0.05}	224 ⁺¹⁹⁵ ₋₈₇	274 ⁺³⁸⁷ ₋₈₅	255 ⁺¹⁷¹ ₋₈₈	285 ⁺²²⁰ ₋₁₁₈
2695	3.24 ± 1.09	184.36 ^{+0.04} _{-0.04}	172.00 ^{+0.04} _{-0.04}	149 ⁺¹⁰⁷ ₋₆₄	182 ⁺²⁰⁶ ₋₅₇	189 ⁺⁹⁸ ₋₇₆	186 ⁺¹²² ₋₇₉
2696	1.22 ± 0.22	98.78 ^{+0.10} _{-0.10}	83.01 ^{+0.10} _{-0.10}	73 ⁺⁴³ ₋₃₆	94 ⁺⁶⁸ ₋₃₂	116 ⁺⁴⁵ ₋₅₈	91 ⁺⁵³ ₋₄₄
2697	3.43 ± 0.72	191.19 ^{+0.04} _{-0.04}	179.47 ^{+0.04} _{-0.04}	156 ⁺¹¹⁴ ₋₆₆	190 ⁺²²⁰ ₋₆₀	195 ⁺¹⁰⁴ ₋₈₂	194 ⁺¹²⁹ ₋₈₂
2700*	4.82 ± 0.29	—	—	198 ⁺¹⁶² ₋₇₉	241 ⁺³¹⁹ ₋₇₅	232 ⁺¹⁴³ ₋₈₄	249 ⁺¹⁸³ ₋₁₀₄
2701	10.60 ± 5.96	393.09 ^{+0.17} _{-0.17}	416.39 ^{+0.20} _{-0.20}	336 ⁺³⁶³ ₋₁₁₇	420 ⁺⁷¹¹ ₋₁₃₁	346 ⁺³⁰² ₋₁₀₄	440 ⁺⁴⁰³ ₋₁₈₃
2703*	6.15 ± 0.27	—	—	234 ⁺²⁰⁹ ₋₉₀	287 ⁺⁴¹³ ₋₈₉	263 ⁺¹⁸¹ ₋₈₉	298 ⁺²³⁴ ₋₁₂₃
2706	3.74 ± 0.44	202.06 ^{+0.03} _{-0.03}	191.44 ^{+0.04} _{-0.04}	166 ⁺¹²⁴ ₋₆₉	202 ⁺²⁴² ₋₆₃	204 ⁺¹¹² ₋₇₉	207 ⁺¹⁴¹ ₋₈₇
2709	3.36 ± 0.34	188.69 ^{+0.04} _{-0.04}	176.73 ^{+0.04} _{-0.04}	153 ⁺¹¹¹ ₋₆₅	187 ⁺²¹⁵ ₋₅₉	193 ⁺¹⁰² ₋₇₆	191 ⁺¹²⁷ ₋₈₁
2711	0.70 ± 0.38	69.02 ^{+0.12} _{-0.12}	54.62 ^{+0.12} _{-0.12}	48 ⁺²⁹ ₋₂₅	67 ⁺³⁷ ₋₂₃	88 ⁺³⁴ ₋₄₉	63 ⁺³⁹ ₋₃₃
2715	148.00 ± 8.79	2117.80 ^{+11.28} _{-11.22}	2975.22 ^{+19.04} _{-18.91}	1425 ⁺²³⁵⁸ ₋₄₉₄	1923 ⁺³⁹⁸⁴ ₋₇₅₉	1109 ⁺¹⁶⁷⁵ ₋₃₉₄	1911 ⁺²⁹¹³ ₋₉₆₅
2719	2.04 ± 1.52	137.19 ^{+0.06} _{-0.06}	121.81 ^{+0.07} _{-0.07}	107 ⁺⁶⁸ ₋₄₉	132 ⁺¹²² ₋₄₃	150 ⁺⁶⁵ ₋₆₇	132 ⁺⁷⁹ ₋₅₉
2725	17.30 ± 6.83	537.51 ^{+0.47} _{-0.47}	600.04 ^{+0.61} _{-0.61}	457 ⁺⁵⁷⁹ ₋₁₄₈	584 ⁺¹¹⁰⁶ ₋₁₈₇	439 ⁺⁴⁶³ ₋₁₂₄	610 ⁺⁶³⁴ ₋₂₆₄
2727	13.40 ± 3.92	456.58 ^{+0.28} _{-0.28}	495.94 ^{+0.35} _{-0.35}	390 ⁺⁴⁵⁶ ₋₁₃₁	493 ⁺⁸⁸⁴ ₋₁₅₅	388 ⁺³⁷² ₋₁₁₃	516 ⁺⁵⁰³ ₋₂₁₈
2728	40.80 ± 6.05	929.85 ^{+2.01} _{-2.01}	1137.92 ^{+2.92} _{-2.91}	748 ⁺¹¹⁶⁸ ₋₃₄₀	995 ⁺²⁰⁹¹ ₋₃₄₃	653 ⁺⁸⁷⁸ ₋₁₈₆	1021 ⁺¹²⁶³ ₋₄₈₀
2736	4.08 ± 0.67	213.60 ^{+0.03} _{-0.03}	204.27 ^{+0.04} _{-0.04}	176 ⁺¹³⁶ ₋₇₃	215 ⁺²⁶⁶ ₋₆₇	213 ⁺¹²² ₋₈₀	220 ⁺¹⁵⁴ ₋₉₂
2748	2.62 [†]	160.97 ^{+0.05} _{-0.05}	146.80 ^{+0.05} _{-0.05}	128 ⁺⁸⁶ ₋₅₀	157 ⁺¹⁶² ₋₅₀	170 ⁺⁸¹ ₋₇₂	159 ⁺⁹⁹ ₋₆₉
2749	3.21 ± 1.63	183.26 ^{+0.04} _{-0.04}	170.81 ^{+0.04} _{-0.04}	148 ⁺¹⁰⁶ ₋₆₄	181 ⁺²⁰⁴ ₋₅₇	189 ⁺⁹⁷ ₋₇₆	184 ⁺¹²¹ ₋₇₉
2750	1.28 [†]	101.86 ^{+0.09} _{-0.09}	86.04 ^{+0.10} _{-0.10}	76 ⁺⁴⁵ ₋₃₇	97 ⁺⁷² ₋₃₂	118 ⁺⁴⁶ ₋₅₉	94 ⁺⁵⁴ ₋₄₅
2751	2.94 ± 2.25	173.26 ^{+0.04} _{-0.04}	159.98 ^{+0.05} _{-0.05}	139 ⁺⁹⁷ ₋₆₁	170 ⁺¹⁸⁵ ₋₅₄	180 ⁺⁹⁰ ₋₇₄	173 ⁺¹¹¹ ₋₇₄
2753	3.23 ± 1.03	183.99 ^{+0.04} _{-0.04}	171.61 ^{+0.04} _{-0.04}	149 ⁺¹⁰⁷ ₋₆₄	182 ⁺²⁰⁵ ₋₅₇	189 ⁺⁹⁸ ₋₇₉	185 ⁺¹²² ₋₇₉
2755	6.11 [†]	276.47 ^{+0.05} _{-0.05}	276.08 ^{+0.05} _{-0.05}	233 ⁺²⁰⁷ ₋₉₀	285 ⁺⁴¹⁰ ₋₈₈	262 ⁺¹⁸⁰ ₋₈₉	297 ⁺²³³ ₋₁₂₃
2757	66.50 [†]	1270.40 ^{+4.05} _{-4.04}	1638.19 ^{+6.24} _{-6.21}	967 ⁺¹⁶⁰⁶ ₋₃₀₄	1304 ⁺²⁷⁷⁷ ₋₄₇₄	807 ⁺¹¹⁷⁴ ₋₂₄₇	1320 ⁺¹⁷⁷¹ ₋₆₄₆
2760	7.54 ± 3.70	316.22 ^{+0.07} _{-0.07}	322.96 ^{+0.08} _{-0.08}	269 ⁺²⁵⁷ ₋₉₉	331 ⁺⁵⁰⁹ ₋₁₀₃	291 ⁺²²⁰ ₋₉₄	346 ⁺²⁸⁸ ₋₁₄₃
2767	2.41 [†]	152.60 ^{+0.05} _{-0.05}	137.93 ^{+0.06} _{-0.06}	121 ⁺⁸⁰ ₋₅₄	148 ⁺¹⁴⁸ ₋₄₇	163 ⁺⁷⁵ ₋₇₀	149 ⁺⁹² ₋₆₆
2770	17.90 ± 1.03	549.34 ^{+0.50} _{-0.50}	615.49 ^{+0.65} _{-0.65}	466 ⁺⁵⁹⁷ ₋₁₅₀	597 ⁺¹¹³⁸ ₋₁₉₂	446 ⁺⁴⁷⁶ ₋₁₂₆	624 ⁺⁶⁵³ ₋₂₇₁
2774	6.58 ± 1.51	289.87 ^{+0.05} _{-0.05}	291.77 ^{+0.06} _{-0.06}	245 ⁺²²⁴ ₋₉₃	301 ⁺⁴⁴³ ₋₉₃	272 ⁺¹⁹³ ₋₉₁	313 ⁺²⁵¹ ₋₁₂₉
2775	12.50 ± 5.74	436.74 ^{+0.24} _{-0.24}	470.88 ^{+0.30} _{-0.30}	373 ⁺⁴²⁷ ₋₁₂₇	470 ⁺⁸³⁰ ₋₁₄₈	375 ⁺³⁵⁰ ₋₁₁₀	492 ⁺⁴⁷² ₋₂₀₇
2776	6.48 [†]	287.05 ^{+0.05} _{-0.05}	288.45 ^{+0.06} _{-0.06}	243 ⁺²²⁰ ₋₉₂	298 ⁺⁴³⁶ ₋₉₂	270 ⁺¹⁹¹ ₋₁₂₈	310 ⁺²⁴⁷ ₋₁₂₈
2780	10.60 ± 0.70	393.09 ^{+0.17} _{-0.17}	416.39 ^{+0.20} _{-0.20}	336 ⁺³⁶³ ₋₁₁₇	420 ⁺⁷¹¹ ₋₁₃₁	346 ⁺³⁰² ₋₁₀₄	440 ⁺⁴⁰³ ₋₁₈₃
2788	14.90 ± 2.64	488.60 ^{+0.35} _{-0.35}	536.79 ^{+0.44} _{-0.44}	417 ⁺⁵⁰⁵ ₋₁₃₈	529 ⁺⁹⁷² ₋₁₆₈	408 ⁺⁴⁰⁸ ₋₁₁₇	554 ⁺⁵⁵⁵ ₋₂₃₆
2790*	3.14 ± 0.17	—	—	146 ⁺¹⁰⁴ ₋₆₃	178 ⁺¹⁹⁹ ₋₅₆	186 ⁺⁹⁵ ₋₇₈	181 ⁺¹¹⁸ ₋₇₈
2793	21.10 ± 1.42	610.20 ^{+0.68} _{-0.68}	695.83 ^{+0.91} _{-0.90}	514 ⁺⁶⁹¹ ₋₂₁₆	665 ⁺¹³⁰² ₋₂₁₆	483 ⁺⁵⁴⁴ ₋₃₀₅	693 ⁺⁷⁵³ ₋₃₀₅
2795	53.50 ± 13.70	1105.59 ^{+2.99} _{-2.98}	1392.84 ^{+4.49} _{-4.48}	864 ⁺¹⁴⁰⁴ ₋₂₆₈	1160 ⁺²⁴⁶⁴ ₋₄₁₁	736 ⁺¹⁰³⁹ ₋₂₁₇	1181 ⁺¹⁵³⁰ ₋₅₆₉
2797*	5.25 ± 0.25	—	—	210 ⁺¹⁷⁷ ₋₈₃	256 ⁺³⁴⁹ ₋₇₉	242 ⁺¹⁵⁶ ₋₈₆	266 ⁺¹⁹⁹ ₋₁₁₀

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
2798*	12.40 ± 0.12	—	—	371 ⁺⁴²⁴ ₋₁₂₆	467 ⁺⁸²⁴ ₋₁₄₇	373 ⁺³⁴⁸ ₋₁₁₀	489 ⁺⁴⁶⁸ ₋₂₀₆
2799	3.49 ± 0.82	193.32 ^{+0.04} _{-0.04}	181.81 ^{+0.04} _{-0.04}	158 ⁺¹¹⁶ ₋₆₇	192 ⁺²²⁴ ₋₇₇	197 ⁺¹⁰⁵ ₋₇₇	196 ⁺¹³² ₋₈₃
2800	24.20 ± 9.73	666.04 ^{+0.86} _{-0.86}	770.74 ^{+1.18} _{-1.17}	558 ⁺¹⁷⁷ ₋₁₇₄	725 ⁺¹⁴⁴⁹ ₋₂₃₈	515 ⁺⁶⁰⁶ ₋₁₄₃	754 ⁺⁸⁴⁴ ₋₃₃₇
2801	4.08 [†]	213.60 ^{+0.03} _{-0.03}	204.27 ^{+0.04} _{-0.04}	176 ⁺¹³⁶ ₋₇₃	215 ⁺²⁶⁶ ₋₆₇	213 ⁺¹²² ₋₈₀	220 ⁺¹⁵⁴ ₋₉₂
2810	7.11 ± 4.53	304.58 ^{+0.07} _{-0.07}	309.12 ^{+0.07} _{-0.07}	258 ⁺²⁴² ₋₉₇	318 ⁺⁴⁸⁰ ₋₉₈	283 ⁺²⁰⁸ ₋₉₃	331 ⁺²⁷² ₋₁₃₇
2812*	4.42 ± 0.21	—	—	186 ⁺¹⁴⁸ ₋₇₆	227 ⁺²⁹⁰ ₋₇₁	222 ⁺¹³² ₋₈₂	234 ⁺¹⁶⁷ ₋₉₈
2814	15.70 ± 11.30	505.20 ^{+0.39} _{-0.39}	558.14 ^{+0.49} _{-0.49}	430 ⁺⁵³⁰ ₋₁₄₁	548 ⁺¹⁰¹⁷ ₋₁₇₄	419 ⁺⁴²⁷ ₋₁₁₉	573 ⁺⁵⁸² ₋₂₄₆
2815	4.80 ± 0.81	236.97 ^{+0.03} _{-0.03}	230.60 ^{+0.04} _{-0.04}	197 ⁺¹⁶¹ ₋₇₉	241 ⁺³¹⁷ ₋₇₅	232 ⁺¹⁴³ ₋₈₄	249 ⁺¹⁸² ₋₁₀₃
2821	2.46 ± 2.18	154.61 ^{+0.05} _{-0.05}	140.06 ^{+0.06} _{-0.06}	122 ⁺⁸¹ ₋₅₅	151 ⁺¹⁵¹ ₋₆₅	165 ⁺⁷⁶ ₋₇₀	151 ⁺⁹³ ₋₆₇
2823	1.85 [†]	128.88 ^{+0.07} _{-0.07}	113.24 ^{+0.08} _{-0.08}	99 ⁺⁶² ₋₄₆	124 ⁺¹⁰⁹ ₋₄₀	142 ⁺⁶⁰ ₋₆₅	123 ⁺⁷² ₋₅₆
2825	34.00 ± 28.00	827.62 ^{+1.52} _{-1.51}	993.23 ^{+2.16} _{-2.15}	677 ⁺¹⁰²⁰ ₋₂₀₈	894 ⁺¹⁸⁵⁴ ₋₃₀₂	602 ⁺⁷⁷⁷ ₋₁₆₉	922 ⁺¹¹⁰³ ₋₄₂₆
2828	16.00 ± 7.07	511.34 ^{+0.40} _{-0.40}	566.08 ^{+0.51} _{-0.51}	435 ⁺⁵³⁹ ₋₁₄₂	555 ⁺¹⁰³⁴ ₋₁₇₇	423 ⁺⁴³⁴ ₋₁₂₀	580 ⁺⁵⁹² ₋₂₄₉
2830	0.89 [†]	80.59 ^{+0.11} _{-0.11}	65.45 ^{+0.11} _{-0.11}	58 ⁺³⁴ ₋₂₉	77 ⁺⁴⁸ ₋₂₆	99 ⁺³⁸ ₋₅₃	73 ⁺⁴⁴ ₋₃₇
2831*	8.23 ± 0.04	—	—	285 ⁺²⁸² ₋₁₀₄	352 ⁺⁵⁵⁶ ₋₁₀₉	304 ⁺²³⁹ ₋₉₇	368 ⁺³¹⁵ ₋₁₅₂
2834	28.50 ± 1.95	739.39 ^{+1.14} _{-1.14}	870.74 ^{+1.59} _{-1.58}	613 ⁺⁸⁸⁹ ₋₁₉₀	803 ⁺¹⁶³⁷ ₋₂₆₇	555 ⁺⁶⁸⁵ ₋₁₅₅	832 ⁺⁹⁶³ ₋₃₇₇
2843	10.50 ± 2.64	390.71 ^{+0.16} _{-0.16}	413.45 ^{+0.19} _{-0.19}	334 ⁺³⁶⁰ ₋₁₁₇	417 ⁺⁷⁰⁵ ₋₁₃₀	344 ⁺²⁹⁹ ₋₁₀₄	437 ⁺⁴⁰⁰ ₋₁₈₂
2844	2.09 [†]	139.33 ^{+0.06} _{-0.06}	124.03 ^{+0.07} _{-0.07}	109 ⁺⁵⁰ ₋₅₀	135 ⁺¹²⁶ ₋₄₃	151 ⁺⁶⁵ ₋₆₇	134 ⁺⁸⁰ ₋₆₀
2846	6.70 [†]	293.24 ^{+0.06} _{-0.06}	295.73 ^{+0.06} _{-0.06}	248 ⁺²²⁸ ₋₉₄	305 ⁺⁴⁵¹ ₋₉₄	274 ⁺¹⁹⁷ ₋₉₁	317 ⁺²⁵⁶ ₋₁₃₁
2848	1.25 ± 1.14	100.33 ^{+0.09} _{-0.09}	84.53 ^{+0.10} _{-0.10}	74 ⁺⁴⁴ ₋₃₆	96 ⁺⁷⁰ ₋₃₂	117 ⁺⁴⁵ ₋₅₈	93 ⁺⁵³ ₋₄₅
2849	1.46 [†]	110.79 ^{+0.08} _{-0.08}	94.91 ^{+0.09} _{-0.09}	83 ⁺⁵⁰ ₋₄₀	106 ⁺⁸⁴ ₋₃₅	126 ⁺⁵⁰ ₋₆₁	103 ⁺⁶⁰ ₋₄₉
2850	0.51 [†]	56.52 ^{+0.13} _{-0.13}	43.25 ^{+0.13} _{-0.13}	38 ⁺²⁴ ₋₂₀	56 ⁺²⁷ ₋₂₀	76 ⁺³¹ ₋₄₄	52 ⁺³⁶ ₋₂₈
2851	2.74 [†]	165.64 ^{+0.05} _{-0.05}	151.79 ^{+0.05} _{-0.05}	132 ⁺⁹⁰ ₋₅₈	162 ⁺¹⁷¹ ₋₅₁	174 ⁺⁸⁴ ₋₇₂	164 ⁺¹⁰⁴ ₋₇₁
2852*	7.51 ± 0.16	—	—	268 ⁺²⁵⁶ ₋₉₉	330 ⁺⁵⁰⁷ ₋₁₀₂	291 ⁺²¹⁹ ₋₉₄	345 ⁺²⁸⁷ ₋₁₄₂
2853	4.11 ± 1.15	214.61 ^{+0.03} _{-0.03}	205.39 ^{+0.04} _{-0.04}	177 ⁺¹³⁷ ₋₇₃	216 ⁺²⁶⁸ ₋₆₇	214 ⁺¹²³ ₋₈₀	222 ⁺¹⁵⁵ ₋₉₃
2855*	16.40 ± 0.18	—	—	442 ⁺⁵⁵² ₋₁₄₄	564 ⁺¹⁰⁵⁶ ₋₁₈₀	428 ⁺⁴⁴³ ₋₁₂₁	590 ⁺⁶⁰⁵ ₋₂₅₄
2856*	14.00 ± 0.20	—	—	401 ⁺⁴⁷⁶ ₋₁₃₄	507 ⁺⁹²⁰ ₋₁₆₀	396 ⁺³⁸⁷ ₋₁₁₄	531 ⁺⁵²⁴ ₋₂₂₆
2857	3.07 ± 2.19	178.12 ^{+0.04} _{-0.04}	165.23 ^{+0.05} _{-0.05}	144 ⁺¹⁰¹ ₋₆₂	176 ⁺¹⁹⁴ ₋₅₅	184 ⁺⁹³ ₋₇₅	178 ⁺¹¹⁶ ₋₇₇
2858	3.01 ± 1.54	175.89 ^{+0.04} _{-0.04}	162.81 ^{+0.05} _{-0.05}	142 ⁺⁹⁹ ₋₆₂	173 ⁺¹⁹⁰ ₋₅₅	182 ⁺⁹² ₋₇₄	176 ⁺¹¹⁴ ₋₇₆
2860	9.52 ± 4.20	367.01 ^{+0.13} _{-0.13}	384.31 ^{+0.15} _{-0.15}	313 ⁺³²⁶ ₋₁₁₁	390 ⁺⁶⁴² ₋₁₂₁	328 ⁺²⁷⁴ ₋₁₀₁	408 ⁺³⁶³ ₋₁₆₉
2861	8.66 ± 5.26	345.47 ^{+0.10} _{-0.10}	358.11 ^{+0.12} _{-0.12}	294 ⁺²⁹⁷ ₋₁₁₃	365 ⁺⁵⁸⁵ ₋₉₈	312 ⁺²⁵¹ ₋₉₈	381 ⁺³³¹ ₋₁₅₈
2862	5.80 ± 2.10	267.42 ^{+0.04} _{-0.04}	265.56 ^{+0.05} _{-0.05}	225 ⁺¹⁹⁶ ₋₈₇	275 ⁺³⁸⁸ ₋₈₅	255 ⁺¹⁷¹ ₋₈₈	286 ⁺²²¹ ₋₁₁₈
2863*	6.14 ± 0.54	—	—	234 ⁺²⁰⁸ ₋₉₀	286 ⁺⁴¹² ₋₈₉	263 ⁺¹⁸¹ ₋₈₉	298 ⁺²³⁴ ₋₁₂₃
2864	5.29 ± 1.37	252.15 ^{+0.04} _{-0.04}	247.94 ^{+0.04} _{-0.04}	211 ⁺¹⁷⁸ ₋₈₃	258 ⁺³⁵² ₋₈₀	243 ⁺¹⁵⁷ ₋₁₁₁	267 ⁺²⁰¹ ₋₁₁₁
2873	4.64 [†]	231.90 ^{+0.03} _{-0.03}	224.84 ^{+0.04} _{-0.04}	193 ⁺¹⁵⁵ ₋₇₈	235 ⁺³⁰⁶ ₋₇₃	228 ⁺¹³⁸ ₋₈₃	242 ⁺¹⁷⁶ ₋₁₀₁
2877	1.20 ± 0.11	97.75 ^{+0.10} _{-0.10}	81.99 ^{+0.10} _{-0.10}	72 ⁺⁴² ₋₃₅	93 ⁺⁶⁷ ₋₃₁	115 ⁺⁴⁴ ₋₅₈	90 ⁺⁵² ₋₄₄
2879	3.45 [†]	191.90 ^{+0.04} _{-0.04}	180.25 ^{+0.04} _{-0.04}	156 ⁺¹¹⁴ ₋₆₆	191 ⁺²²¹ ₋₆₀	196 ⁺¹⁰⁴ ₋₈₃	195 ⁺¹³⁰ ₋₈₃
2880	1.51 ± 0.53	113.20 ^{+0.08} _{-0.08}	97.32 ^{+0.09} _{-0.09}	86 ⁺⁵¹ ₋₄₁	108 ⁺⁸⁷ ₋₃₆	128 ⁺⁵² ₋₅₀	106 ⁺⁶¹ ₋₅₀
2889*	10.30 ± 0.27	—	—	330 ⁺³⁵³ ₋₁₁₅	411 ⁺⁶⁹² ₋₁₂₈	341 ⁺²⁹⁴ ₋₁₀₃	431 ⁺³⁹² ₋₁₈₀
2890	19.30 ± 0.56	576.41 ^{+0.58} _{-0.58}	651.06 ^{+0.76} _{-0.76}	488 ⁺⁶³⁹ ₋₁₅₆	627 ⁺¹²¹¹ ₋₂₀₂	463 ⁺⁵⁰⁷ ₋₁₂₉	655 ⁺⁶⁹⁸ ₋₂₈₆
2891*	23.00 ± 0.41	—	—	541 ⁺⁷⁴⁴ ₋₁₇₀	702 ⁺¹³⁹³ ₋₂₂₉	503 ⁺⁵⁸³ ₋₁₄₀	731 ⁺⁸⁰⁹ ₋₃₂₅
2892	2.33 [†]	149.34 ^{+0.06} _{-0.06}	134.50 ^{+0.06} _{-0.06}	118 ⁺⁷⁷ ₋₅₃	145 ⁺¹⁴² ₋₄₆	160 ⁺⁷³ ₋₆₉	145 ⁺⁸⁹ ₋₆₄
2894	5.44 ± 0.41	256.70 ^{+0.04} _{-0.04}	253.17 ^{+0.04} _{-0.04}	215 ⁺¹⁸⁴ ₋₈₄	263 ⁺³⁶³ ₋₈₁	247 ⁺¹⁶¹ ₋₈₇	273 ⁺²⁰⁷ ₋₁₁₃
2896	1.83 ± 0.34	127.99 ^{+0.07} _{-0.07}	112.33 ^{+0.08} _{-0.08}	99 ⁺⁶¹ ₋₄₆	123 ⁺¹⁰⁸ ₋₄₀	142 ⁺⁶⁰ ₋₆₅	122 ⁺⁷² ₋₅₆
2897	0.37 ± 0.06	45.78 ^{+0.14} _{-0.14}	33.82 ^{+0.13} _{-0.13}	30 ⁺²¹ ₋₁₆	47 ⁺²⁰ ₋₁₇	65 ⁺³⁴ ₋₂₄	43 ⁺³⁴ ₋₂₄
2898	4.49 ± 2.19	227.08 ^{+0.03} _{-0.03}	219.40 ^{+0.04} _{-0.04}	188 ⁺¹⁵⁰ ₋₇₆	230 ⁺²⁹⁵ ₋₇₁	224 ⁺¹³⁴ ₋₉₉	237 ⁺¹⁷⁰ ₋₉₉
2900	11.10 ± 5.34	404.83 ^{+0.18} _{-0.18}	430.95 ^{+0.22} _{-0.22}	346 ⁺³⁸⁰ ₋₁₂₀	433 ⁺⁷⁴³ ₋₁₃₅	353 ⁺³¹⁵ ₋₁₀₆	454 ⁺⁴²¹ ₋₁₉₀
2901	0.09 [†]	19.25 ^{+0.13} _{-0.13}	12.30 ^{+0.11} _{-0.10}	13 ⁺¹³ ₋₇	28 ⁺¹⁰ ₋₁₁	39 ⁺²⁸ ₋₂₈	23 ⁺³² ₋₁₅
2910	135.00 ± 54.30	1997.00 ^{+10.09} _{-10.04}	2778.03 ^{+16.85} _{-16.75}	1365 ⁺²²⁷⁶ ₋₄₆₇	1845 ⁺³⁸⁴⁰ ₋₇₂₂	1071 ⁺¹⁶²⁰ ₋₃₇₄	1837 ⁺²⁷⁵⁶ ₋₉₂₇
2913	2.12 ± 0.38	140.60 ^{+0.06} _{-0.06}	125.35 ^{+0.07} _{-0.07}	110 ⁺⁷⁰ ₋₅₀	136 ⁺¹²⁸ ₋₄₄	153 ⁺⁶⁷ ₋₆₈	136 ⁺⁸² ₋₆₁

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
2916	5.66 ± 2.31	$263.28^{+0.04}_{-0.04}$	$260.76^{+0.04}_{-0.04}$	221^{+191}_{-86}	270^{+378}_{-84}	252^{+167}_{-87}	281^{+215}_{-116}
2917	0.45^\dagger	$52.46^{+0.14}_{-0.14}$	$39.65^{+0.13}_{-0.13}$	35^{+23}_{-19}	53^{+24}_{-19}	72^{+31}_{-43}	48^{+35}_{-27}
2918	19.60 ± 4.76	$582.12^{+0.59}_{-0.59}$	$658.59^{+0.78}_{-0.78}$	492^{+648}_{-157}	634^{+1226}_{-204}	466^{+513}_{-130}	661^{+707}_{-289}
2919*	7.44 ± 0.34	—	—	266^{+254}_{-99}	328^{+502}_{-102}	289^{+217}_{-94}	342^{+284}_{-141}
2922	2.59 ± 0.35	$159.79^{+0.05}_{-0.05}$	$145.55^{+0.05}_{-0.05}$	127^{+85}_{-57}	156^{+160}_{-156}	169^{+80}_{-71}	157^{+98}_{-69}
2924	3.00 ± 0.72	$175.51^{+0.04}_{-0.04}$	$162.41^{+0.05}_{-0.05}$	141^{+99}_{-61}	173^{+189}_{-55}	182^{+92}_{-74}	175^{+113}_{-75}
2925	1.91 ± 0.87	$131.54^{+0.07}_{-0.07}$	$115.97^{+0.07}_{-0.07}$	102^{+64}_{-47}	127^{+113}_{-41}	145^{+62}_{-66}	126^{+74}_{-57}
2927	0.79 ± 0.58	$74.90^{+0.12}_{-0.12}$	$60.09^{+0.12}_{-0.12}$	53^{+31}_{-27}	72^{+43}_{-25}	93^{+36}_{-51}	68^{+41}_{-35}
2929	13.50 ± 0.22	$458.75^{+0.28}_{-0.28}$	$498.70^{+0.35}_{-0.35}$	392^{+460}_{-131}	495^{+890}_{-156}	389^{+375}_{-113}	518^{+507}_{-220}
2931	5.29 ± 1.66	$252.15^{+0.04}_{-0.04}$	$247.94^{+0.04}_{-0.04}$	211^{+83}_{-83}	258^{+352}_{-80}	243^{+157}_{-86}	267^{+201}_{-111}
2932	2.02 ± 0.68	$136.33^{+0.06}_{-0.06}$	$120.92^{+0.07}_{-0.07}$	106^{+67}_{-49}	132^{+121}_{-42}	149^{+65}_{-67}	131^{+78}_{-59}
2933	27.10 ± 6.05	$715.98^{+1.05}_{-1.05}$	$838.64^{+1.45}_{-1.45}$	595^{+853}_{-185}	779^{+1578}_{-258}	543^{+660}_{-151}	807^{+925}_{-364}
2944	5.37 ± 1.47	$254.58^{+0.04}_{-0.04}$	$250.73^{+0.04}_{-0.04}$	213^{+181}_{-84}	261^{+358}_{-81}	245^{+159}_{-86}	270^{+204}_{-112}
2945	0.78^\dagger	$74.05^{+0.12}_{-0.12}$	$59.29^{+0.12}_{-0.12}$	52^{+31}_{-27}	71^{+42}_{-25}	93^{+35}_{-51}	67^{+41}_{-35}
2947	0.90 ± 0.64	$81.34^{+0.11}_{-0.11}$	$66.16^{+0.11}_{-0.11}$	58^{+34}_{-29}	78^{+49}_{-27}	99^{+38}_{-53}	74^{+44}_{-37}
2948	2.94 ± 0.60	$173.26^{+0.04}_{-0.04}$	$159.98^{+0.05}_{-0.05}$	139^{+97}_{-61}	170^{+185}_{-54}	180^{+90}_{-74}	173^{+111}_{-74}
2950	1.20 ± 0.25	$97.75^{+0.10}_{-0.10}$	$81.99^{+0.10}_{-0.10}$	72^{+42}_{-35}	93^{+67}_{-31}	115^{+44}_{-58}	90^{+52}_{-44}
2951	1.79 ± 0.75	$126.20^{+0.07}_{-0.07}$	$110.49^{+0.08}_{-0.08}$	97^{+60}_{-45}	121^{+105}_{-39}	140^{+59}_{-65}	120^{+70}_{-55}
2952	36.40 ± 3.33	$864.48^{+1.69}_{-1.69}$	$1045.07^{+2.42}_{-2.41}$	703^{+1074}_{-216}	931^{+1941}_{-317}	621^{+814}_{-175}	958^{+1162}_{-446}
2953	5.80 ± 0.11	$267.42^{+0.04}_{-0.04}$	$265.56^{+0.05}_{-0.05}$	225^{+196}_{-87}	275^{+388}_{-85}	255^{+171}_{-88}	286^{+221}_{-118}
2958	3.06 ± 0.35	$177.75^{+0.04}_{-0.04}$	$164.82^{+0.05}_{-0.05}$	143^{+101}_{-62}	175^{+193}_{-55}	184^{+93}_{-75}	178^{+115}_{-76}
2961	12.10 ± 1.68	$427.76^{+0.22}_{-0.22}$	$459.59^{+0.27}_{-0.27}$	366^{+414}_{-125}	460^{+805}_{-144}	369^{+340}_{-109}	481^{+457}_{-202}
2964	3.49^\dagger	$193.32^{+0.04}_{-0.04}$	$181.81^{+0.04}_{-0.04}$	158^{+116}_{-67}	192^{+224}_{-77}	197^{+132}_{-105}	196^{+132}_{-83}
2966	7.52 ± 6.13	$315.68^{+0.07}_{-0.07}$	$322.32^{+0.08}_{-0.08}$	268^{+257}_{-99}	330^{+508}_{-102}	291^{+220}_{-94}	345^{+287}_{-142}
2973	5.26 ± 2.83	$251.24^{+0.04}_{-0.04}$	$246.89^{+0.04}_{-0.04}$	210^{+177}_{-83}	257^{+350}_{-80}	243^{+156}_{-86}	266^{+200}_{-110}
2975	39.90 ± 10.80	$916.69^{+1.94}_{-1.94}$	$1119.15^{+2.82}_{-2.81}$	739^{+1149}_{-227}	982^{+2062}_{-338}	647^{+865}_{-184}	1009^{+1243}_{-473}
2977	11.60 ± 2.45	$416.39^{+0.20}_{-0.20}$	$445.35^{+0.25}_{-0.25}$	356^{+397}_{-122}	446^{+775}_{-140}	361^{+328}_{-107}	468^{+440}_{-196}
2978	5.10 ± 1.22	$246.33^{+0.04}_{-0.04}$	$241.27^{+0.04}_{-0.04}$	206^{+172}_{-82}	251^{+339}_{-78}	239^{+151}_{-85}	260^{+194}_{-108}
2980	0.18^\dagger	$29.09^{+0.14}_{-0.14}$	$19.92^{+0.12}_{-0.12}$	19^{+16}_{-10}	35^{+12}_{-13}	49^{+29}_{-33}	30^{+33}_{-18}
2984	14.20 ± 0.52	$473.81^{+0.31}_{-0.31}$	$517.86^{+0.40}_{-0.40}$	404^{+482}_{-135}	512^{+931}_{-162}	399^{+392}_{-115}	536^{+531}_{-228}
2985	1.50 ± 0.95	$112.72^{+0.08}_{-0.08}$	$96.84^{+0.09}_{-0.09}$	85^{+51}_{-41}	108^{+86}_{-35}	128^{+51}_{-61}	105^{+61}_{-50}
2986	2.39^\dagger	$151.79^{+0.05}_{-0.05}$	$137.08^{+0.06}_{-0.06}$	120^{+79}_{-54}	148^{+146}_{-47}	162^{+75}_{-65}	148^{+91}_{-65}
2987	14.80^\dagger	$486.50^{+0.34}_{-0.34}$	$534.10^{+0.43}_{-0.43}$	415^{+501}_{-137}	527^{+966}_{-167}	407^{+406}_{-117}	551^{+551}_{-235}
2988	18.30 ± 5.66	$557.15^{+0.52}_{-0.52}$	$625.73^{+0.68}_{-0.68}$	472^{+609}_{-152}	606^{+1159}_{-195}	451^{+485}_{-127}	633^{+666}_{-275}
2990	0.61^\dagger	$63.58^{+0.13}_{-0.13}$	$49.62^{+0.12}_{-0.12}$	44^{+27}_{-23}	62^{+33}_{-22}	83^{+33}_{-47}	58^{+37}_{-31}
2992	4.23^\dagger	$218.59^{+0.03}_{-0.03}$	$209.85^{+0.04}_{-0.04}$	181^{+141}_{-74}	220^{+277}_{-69}	217^{+126}_{-81}	226^{+160}_{-95}
2993*	31.10 ± 0.90	—	—	644^{+953}_{-198}	847^{+1743}_{-284}	578^{+729}_{-161}	876^{+1031}_{-401}
2994*	19.30 ± 0.36	—	—	488^{+639}_{-156}	627^{+1211}_{-202}	463^{+507}_{-129}	655^{+698}_{-286}
2995	15.60 ± 4.06	$503.14^{+0.38}_{-0.38}$	$555.49^{+0.49}_{-0.49}$	429^{+527}_{-141}	545^{+1012}_{-173}	418^{+425}_{-119}	571^{+578}_{-245}
2996	2.16 ± 0.85	$142.29^{+0.06}_{-0.06}$	$127.11^{+0.07}_{-0.07}$	111^{+72}_{-51}	138^{+130}_{-44}	154^{+68}_{-68}	137^{+83}_{-61}
2998	0.98 ± 0.52	$85.88^{+0.11}_{-0.11}$	$70.50^{+0.11}_{-0.11}$	62^{+36}_{-31}	82^{+54}_{-28}	104^{+39}_{-54}	78^{+46}_{-39}
3001	2.70 ± 0.40	$164.09^{+0.05}_{-0.05}$	$150.13^{+0.05}_{-0.05}$	131^{+89}_{-58}	161^{+168}_{-51}	173^{+83}_{-72}	162^{+102}_{-71}
3003	12.90 ± 0.40	$445.62^{+0.26}_{-0.26}$	$482.07^{+0.32}_{-0.32}$	381^{+440}_{-129}	480^{+854}_{-111}	381^{+360}_{-212}	503^{+486}_{-212}
3005	4.83 ± 1.24	$237.92^{+0.03}_{-0.03}$	$231.67^{+0.04}_{-0.04}$	198^{+162}_{-79}	242^{+319}_{-75}	232^{+144}_{-84}	250^{+183}_{-104}
3011	10.50 ± 1.88	$390.71^{+0.16}_{-0.16}$	$413.45^{+0.19}_{-0.19}$	334^{+360}_{-117}	417^{+705}_{-130}	344^{+299}_{-104}	437^{+400}_{-182}
3012	1.49 ± 1.45	$112.24^{+0.08}_{-0.08}$	$96.36^{+0.09}_{-0.09}$	85^{+51}_{-41}	107^{+86}_{-35}	128^{+51}_{-61}	105^{+61}_{-49}
3015	4.99 ± 1.07	$242.92^{+0.04}_{-0.04}$	$237.37^{+0.04}_{-0.04}$	203^{+168}_{-81}	247^{+331}_{-77}	236^{+148}_{-85}	256^{+189}_{-106}
3016	363.00^\dagger	$3756.55^{+31.56}_{-31.30}$	$5809.73^{+58.87}_{-58.28}$	2139^{+2976}_{-819}	2801^{+5680}_{-1175}	1522^{+2173}_{-600}	2754^{+4966}_{-1339}
3017	2.16 ± 0.37	$142.29^{+0.06}_{-0.06}$	$127.11^{+0.07}_{-0.07}$	111^{+72}_{-51}	138^{+130}_{-44}	154^{+68}_{-68}	137^{+83}_{-61}

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
3026	2.68 ± 1.24	$163.31^{+0.05}_{-0.05}$	$149.30^{+0.05}_{-0.05}$	130^{+88}_{-58}	160^{+167}_{-51}	172^{+83}_{-72}	161^{+101}_{-70}
3027	110.00 ± 36.50	$1752.12^{+7.83}_{-7.79}$	$2384.49^{+12.77}_{-12.70}$	1239^{+2087}_{-412}	1677^{+3526}_{-643}	989^{+1493}_{-333}	1677^{+2434}_{-842}
3028	0.41^\dagger	$49.15^{+0.14}_{-0.14}$	$36.74^{+0.13}_{-0.13}$	33^{+22}_{-17}	50^{+22}_{-18}	69^{+30}_{-42}	45^{+34}_{-26}
3029	33.80 ± 5.30	$824.50^{+1.50}_{-1.50}$	$988.87^{+2.13}_{-2.13}$	674^{+1016}_{-207}	891^{+1847}_{-301}	600^{+774}_{-168}	919^{+1099}_{-424}
3030	1.88 ± 0.67	$130.21^{+0.07}_{-0.07}$	$114.61^{+0.07}_{-0.07}$	101^{+63}_{-47}	125^{+111}_{-41}	144^{+61}_{-65}	124^{+73}_{-56}
3032	4.98 ± 1.15	$242.61^{+0.04}_{-0.04}$	$237.02^{+0.04}_{-0.04}$	202^{+167}_{-81}	247^{+330}_{-77}	236^{+148}_{-85}	255^{+189}_{-106}
3035*	4.71 ± 0.12	—	—	195^{+158}_{-78}	237^{+311}_{-74}	229^{+140}_{-83}	245^{+178}_{-102}
3037	14.80 ± 10.80	$486.50^{+0.34}_{-0.34}$	$534.10^{+0.43}_{-0.43}$	415^{+501}_{-137}	527^{+966}_{-167}	407^{+406}_{-117}	551^{+551}_{-235}
3038	35.60 ± 9.56	$852.29^{+1.63}_{-1.63}$	$1027.89^{+2.33}_{-2.33}$	694^{+1057}_{-213}	919^{+1913}_{-312}	615^{+802}_{-173}	946^{+1142}_{-439}
3039	4.43 ± 0.60	$225.14^{+0.03}_{-0.03}$	$217.21^{+0.04}_{-0.04}$	187^{+148}_{-76}	227^{+291}_{-71}	222^{+132}_{-82}	234^{+168}_{-98}
3040	2.05 ± 0.65	$137.62^{+0.06}_{-0.06}$	$122.25^{+0.07}_{-0.07}$	107^{+68}_{-49}	133^{+123}_{-43}	150^{+65}_{-67}	132^{+79}_{-59}
3042*	6.47 ± 0.20	—	—	242^{+220}_{-92}	297^{+435}_{-92}	270^{+190}_{-91}	309^{+247}_{-128}
3043	1.24^\dagger	$99.82^{+0.09}_{-0.09}$	$84.02^{+0.10}_{-0.10}$	74^{+44}_{-36}	95^{+70}_{-32}	116^{+45}_{-58}	92^{+53}_{-45}
3044	34.80 ± 2.35	$840.01^{+1.57}_{-1.57}$	$1010.61^{+2.24}_{-2.24}$	685^{+1039}_{-211}	906^{+1884}_{-307}	608^{+789}_{-171}	934^{+1123}_{-432}
3051	210.00^\dagger	$2648.23^{+17.05}_{-16.94}$	$3862.47^{+29.93}_{-29.70}$	1673^{+2643}_{-608}	2238^{+4559}_{-910}	1261^{+1878}_{-473}	2214^{+3586}_{-1113}
3055	1.14 ± 0.13	$94.60^{+0.10}_{-0.10}$	$78.92^{+0.10}_{-0.10}$	70^{+41}_{-34}	90^{+63}_{-30}	112^{+43}_{-57}	87^{+50}_{-43}
3056	1.34 ± 0.18	$104.89^{+0.09}_{-0.09}$	$89.03^{+0.09}_{-0.09}$	78^{+46}_{-38}	100^{+76}_{-33}	121^{+47}_{-59}	97^{+56}_{-46}
3057*	15.10 ± 0.06	—	—	420^{+511}_{-139}	534^{+983}_{-169}	411^{+413}_{-118}	558^{+562}_{-239}
3066	22.90 ± 8.29	$642.96^{+0.79}_{-0.78}$	$739.64^{+1.06}_{-1.06}$	540^{+742}_{-170}	700^{+1389}_{-229}	502^{+581}_{-139}	729^{+806}_{-324}
3067*	6.57 ± 0.10	—	—	245^{+223}_{-93}	300^{+442}_{-93}	272^{+193}_{-91}	313^{+251}_{-129}
3068	1.27 ± 1.08	$101.35^{+0.09}_{-0.09}$	$85.54^{+0.10}_{-0.10}$	75^{+44}_{-37}	97^{+72}_{-32}	118^{+46}_{-59}	94^{+54}_{-45}
3070	5.62 ± 1.18	$262.09^{+0.04}_{-0.04}$	$259.39^{+0.04}_{-0.04}$	220^{+190}_{-86}	269^{+375}_{-83}	251^{+166}_{-87}	279^{+214}_{-115}
3071*	3.53 ± 0.37	—	—	159^{+117}_{-67}	194^{+227}_{-61}	198^{+106}_{-77}	198^{+133}_{-84}
3072	2.44 ± 1.28	$153.81^{+0.05}_{-0.05}$	$139.21^{+0.06}_{-0.06}$	122^{+81}_{-55}	150^{+150}_{-48}	164^{+76}_{-70}	150^{+93}_{-66}
3073	11.40 ± 9.05	$411.79^{+0.20}_{-0.20}$	$439.61^{+0.24}_{-0.24}$	352^{+390}_{-121}	441^{+762}_{-138}	358^{+323}_{-107}	462^{+432}_{-194}
3074	1.40 ± 0.77	$107.86^{+0.09}_{-0.09}$	$91.99^{+0.09}_{-0.09}$	81^{+48}_{-39}	103^{+80}_{-34}	124^{+49}_{-60}	100^{+58}_{-48}
3075	1.48 ± 0.39	$111.76^{+0.08}_{-0.08}$	$95.88^{+0.09}_{-0.09}$	84^{+51}_{-40}	107^{+85}_{-35}	127^{+51}_{-61}	104^{+60}_{-49}
3076	3.26 ± 0.47	$185.08^{+0.04}_{-0.04}$	$172.79^{+0.04}_{-0.04}$	150^{+108}_{-64}	183^{+207}_{-58}	190^{+99}_{-76}	187^{+123}_{-80}
3078	89.50 ± 17.30	$1535.84^{+6.01}_{-5.99}$	$2044.50^{+9.59}_{-9.54}$	1121^{+1890}_{-364}	1518^{+3215}_{-569}	912^{+1362}_{-295}	1525^{+2142}_{-760}
3080	20.50 ± 4.76	$599.06^{+0.64}_{-0.64}$	$681.02^{+0.85}_{-0.85}$	506^{+674}_{-161}	652^{+1272}_{-211}	476^{+532}_{-133}	680^{+735}_{-299}
3084	3.48 ± 0.60	$192.97^{+0.04}_{-0.04}$	$181.42^{+0.04}_{-0.04}$	157^{+115}_{-67}	192^{+223}_{-60}	196^{+105}_{-77}	196^{+131}_{-83}
3085	7.70 ± 2.96	$320.49^{+0.08}_{-0.08}$	$328.06^{+0.09}_{-0.09}$	272^{+263}_{-100}	336^{+520}_{-104}	294^{+224}_{-95}	351^{+294}_{-145}
3087*	7.24 ± 0.85	—	—	261^{+247}_{-97}	322^{+488}_{-100}	285^{+212}_{-93}	336^{+277}_{-139}
3088	5.41^\dagger	$255.79^{+0.04}_{-0.04}$	$252.12^{+0.04}_{-0.04}$	214^{+182}_{-84}	262^{+361}_{-81}	246^{+160}_{-86}	272^{+206}_{-112}
3089	1.46 ± 0.26	$110.79^{+0.08}_{-0.08}$	$94.91^{+0.09}_{-0.09}$	83^{+50}_{-40}	106^{+84}_{-35}	126^{+50}_{-61}	103^{+60}_{-49}
3091	1.07 ± 0.98	$90.84^{+0.10}_{-0.10}$	$75.27^{+0.11}_{-0.11}$	66^{+39}_{-33}	87^{+59}_{-29}	108^{+41}_{-56}	83^{+48}_{-41}
3093	1.36 ± 0.29	$105.88^{+0.09}_{-0.09}$	$90.02^{+0.09}_{-0.09}$	79^{+47}_{-38}	101^{+77}_{-34}	122^{+48}_{-60}	98^{+57}_{-47}
3094	54.70 ± 16.80	$1121.37^{+3.09}_{-3.08}$	$1416.07^{+4.65}_{-4.63}$	874^{+1425}_{-271}	1174^{+2496}_{-417}	743^{+1052}_{-220}	1195^{+1553}_{-576}
3096	1.41 ± 0.56	$108.35^{+0.09}_{-0.09}$	$92.47^{+0.09}_{-0.09}$	81^{+49}_{-39}	104^{+80}_{-34}	124^{+49}_{-60}	101^{+58}_{-48}
3100	0.39 ± 0.11	$47.28^{+0.14}_{-0.14}$	$35.12^{+0.13}_{-0.13}$	32^{+21}_{-17}	49^{+21}_{-18}	67^{+30}_{-41}	44^{+34}_{-25}
3101	5.96 ± 0.78	$272.11^{+0.05}_{-0.05}$	$271.01^{+0.05}_{-0.05}$	229^{+202}_{-88}	280^{+399}_{-87}	259^{+176}_{-89}	291^{+227}_{-120}
3102	3.86 ± 0.64	$206.17^{+0.03}_{-0.03}$	$196.00^{+0.04}_{-0.04}$	169^{+128}_{-71}	206^{+250}_{-64}	207^{+116}_{-79}	212^{+146}_{-89}
3103	0.68 ± 0.55	$68.00^{+0.12}_{-0.12}$	$53.68^{+0.12}_{-0.12}$	47^{+28}_{-24}	66^{+36}_{-23}	87^{+34}_{-49}	62^{+39}_{-33}
3105	6.53 ± 0.34	$288.46^{+0.05}_{-0.05}$	$290.11^{+0.06}_{-0.06}$	244^{+222}_{-93}	299^{+439}_{-93}	271^{+192}_{-91}	312^{+249}_{-129}
3109	1.09 ± 0.20	$91.92^{+0.10}_{-0.10}$	$76.32^{+0.10}_{-0.10}$	67^{+39}_{-33}	88^{+60}_{-30}	109^{+42}_{-56}	84^{+49}_{-41}
3110*	48.00 ± 8.78	—	—	816^{+1307}_{-251}	1092^{+2312}_{-383}	702^{+973}_{-204}	1116^{+1419}_{-532}
3113	36.10 ± 2.32	$859.92^{+1.67}_{-1.66}$	$1038.64^{+2.39}_{-2.38}$	699^{+1068}_{-215}	926^{+1931}_{-315}	619^{+809}_{-174}	954^{+1154}_{-443}
3114	3.90 ± 3.12	$207.54^{+0.03}_{-0.03}$	$197.51^{+0.04}_{-0.04}$	171^{+130}_{-71}	208^{+253}_{-79}	208^{+117}_{-90}	213^{+147}_{-90}
3115*	6.07 ± 0.33	—	—	232^{+206}_{-89}	284^{+407}_{-88}	261^{+179}_{-89}	295^{+231}_{-122}

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
3118	19.30 ± 9.31	576.41 ^{+0.58} _{-0.58}	651.06 ^{+0.76} _{-0.76}	488 ⁺⁶³⁹ ₋₁₅₆	627 ⁺¹²¹¹ ₋₂₀₂	463 ⁺⁵⁰⁷ ₋₁₂₉	655 ⁺⁶⁹⁸ ₋₂₈₆
3119	3.55 ± 0.95	195.44 ^{+0.04} _{-0.04}	184.14 ^{+0.04} _{-0.04}	160 ⁺¹¹⁸ ₋₆₇	194 ⁺²²⁸ ₋₆₁	198 ⁺¹⁰⁷ ₋₇₈	199 ⁺¹³⁴ ₋₈₄
3120	1.35 ± 0.75	105.38 ^{+0.09} _{-0.09}	89.52 ^{+0.09} _{-0.09}	79 ⁺⁴⁷ ₋₃₈	101 ⁺⁷⁷ ₋₃₃	121 ⁺⁴⁶ ₋₆₀	98 ⁺⁵⁶ ₋₄₇
3121	31.10 ± 8.00	781.80 ^{+1.32} _{-1.31}	929.33 ^{+1.85} _{-1.85}	644 ⁺⁹⁵³ ₋₁₉₈	847 ⁺¹⁷⁴³ ₋₂₈₄	578 ⁺⁷²⁹ ₋₁₆₁	876 ⁺¹⁰³¹ ₋₄₀₁
3127	0.94 [†]	83.57 ^{+0.11} _{-0.11}	68.29 ^{+0.11} _{-0.11}	60 ⁺³⁵ ₋₃₀	80 ⁺⁵¹ ₋₂₇	102 ⁺³⁹ ₋₅₄	76 ⁺⁴⁵ ₋₃₈
3128*	9.91 ± 0.12	—	—	322 ⁺³⁴⁰ ₋₁₁₃	401 ⁺⁶⁶⁷ ₋₁₂₅	334 ⁺²⁸⁴ ₋₁₀₂	419 ⁺³⁷⁸ ₋₁₇₅
3129	1.14 ± 0.80	94.60 ^{+0.10} _{-0.10}	78.92 ^{+0.10} _{-0.10}	70 ⁺⁴¹ ₋₃₄	90 ⁺⁶³ ₋₃₀	112 ⁺⁴³ ₋₅₇	87 ⁺⁵⁰ ₋₄₃
3130	0.66 [†]	66.46 ^{+0.12} _{-0.12}	52.26 ^{+0.12} _{-0.12}	46 ⁺²⁸ ₋₂₄	65 ⁺³⁵ ₋₂₃	85 ⁺³³ ₋₄₈	60 ⁺³⁸ ₋₃₂
3131	0.98 ± 0.47	85.83 ^{+0.11} _{-0.11}	70.44 ^{+0.11} _{-0.11}	62 ⁺³⁶ ₋₃₁	82 ⁺⁵⁴ ₋₂₈	104 ⁺³⁹ ₋₅₄	78 ⁺⁴⁶ ₋₃₉
3132	0.59 ± 0.56	62.24 ^{+0.13} _{-0.13}	48.41 ^{+0.12} _{-0.12}	43 ⁺²⁶ ₋₂₂	61 ⁺³² ₋₂₂	81 ⁺³² ₋₄₇	57 ⁺³⁷ ₋₃₀
3134	1.21 [†]	98.27 ^{+0.10} _{-0.10}	82.50 ^{+0.10} _{-0.10}	73 ⁺⁴³ ₋₃₆	94 ⁺⁶⁸ ₋₃₁	115 ⁺⁴⁴ ₋₅₈	91 ⁺⁵² ₋₄₄
3135	0.80 [†]	75.14 ^{+0.12} _{-0.12}	60.31 ^{+0.12} _{-0.12}	53 ⁺³¹ ₋₂₇	72 ⁺⁴³ ₋₂₅	94 ⁺³⁶ ₋₅₁	68 ⁺⁴¹ ₋₃₅
3136	2.83 [†]	169.09 ^{+0.04} _{-0.04}	155.49 ^{+0.05} _{-0.05}	136 ⁺⁹³ ₋₅₉	166 ⁺¹⁷⁷ ₋₅₂	177 ⁺⁸⁷ ₋₇₃	168 ⁺¹⁰⁷ ₋₇₃
3137	61.10 ± 35.80	1203.50 ^{+3.60} _{-3.59}	1537.90 ^{+5.50} _{-5.48}	926 ⁺¹⁵²⁷ ₋₂₈₉	1247 ⁺²⁶⁵⁴ ₋₄₄₉	778 ⁺¹¹²¹ ₋₂₃₅	1265 ⁺¹⁶⁷⁴ ₋₆₁₅
3138*	2.47 ± 0.16	—	—	123 ⁺⁸¹ ₋₅₅	151 ⁺¹⁵² ₋₄₈	165 ⁺⁷⁷ ₋₇₀	152 ⁺⁹⁴ ₋₆₇
3139	0.87 [†]	79.48 ^{+0.11} _{-0.11}	64.40 ^{+0.11} _{-0.11}	57 ⁺³³ ₋₂₉	76 ⁺⁴⁷ ₋₂₆	98 ⁺³⁷ ₋₅₂	72 ⁺⁴³ ₋₃₇
3141	0.34 [†]	43.92 ^{+0.14} _{-0.14}	32.22 ^{+0.13} _{-0.13}	29 ⁺²⁰ ₋₁₅	46 ⁺¹⁹ ₋₁₇	64 ⁺³⁰ ₋₃₉	41 ⁺³³ ₋₂₄
3142	8.24 ± 1.78	334.67 ^{+0.09} _{-0.09}	345.07 ^{+0.10} _{-0.10}	285 ⁺²⁸² ₋₁₀₄	352 ⁺⁵⁵⁷ ₋₁₀₉	305 ⁺²³⁹ ₋₉₇	368 ⁺³¹⁵ ₋₁₅₂
3143	6.71 ± 1.24	293.52 ^{+0.06} _{-0.06}	296.06 ^{+0.06} _{-0.06}	248 ⁺²²⁸ ₋₉₄	305 ⁺⁴⁵² ₋₉₄	275 ⁺¹⁹⁷ ₋₉₁	318 ⁺²⁵⁶ ₋₁₃₁
3144	17.60 ± 11.30	543.44 ^{+0.48} _{-0.48}	607.78 ^{+0.63} _{-0.63}	461 ⁺⁵⁸⁸ ₋₁₄₉	591 ⁺¹¹²² ₋₁₈₉	443 ⁺⁴⁷⁰ ₋₁₂₅	617 ⁺⁶⁴⁴ ₋₂₆₇
3146	12.10 ± 6.16	427.76 ^{+0.22} _{-0.22}	459.59 ^{+0.27} _{-0.27}	366 ⁺⁴¹⁴ ₋₁₂₅	460 ⁺⁸⁰⁵ ₋₁₄₄	369 ⁺³⁴⁰ ₋₁₀₉	481 ⁺⁴⁵⁷ ₋₂₀₂
3152	22.50 ± 1.95	635.76 ^{+0.76} _{-0.76}	729.99 ^{+1.03} _{-1.02}	534 ⁺⁷³¹ ₋₁₆₈	693 ⁺¹³⁷⁰ ₋₂₂₆	498 ⁺⁵⁷³ ₋₁₃₈	721 ⁺⁷⁹⁵ ₋₃₂₀
3153	6.50 ± 2.68	287.61 ^{+0.05} _{-0.05}	289.12 ^{+0.06} _{-0.06}	243 ⁺²²¹ ₋₉₂	298 ⁺⁴³⁷ ₋₉₂	270 ⁺¹⁹¹ ₋₉₁	310 ⁺²⁴⁸ ₋₁₂₈
3155	10.10 ± 3.13	381.14 ^{+0.15} _{-0.15}	401.65 ^{+0.18} _{-0.18}	326 ⁺³⁴⁶ ₋₁₁₄	406 ⁺⁶⁷⁹ ₋₁₂₆	337 ⁺²⁸⁹ ₋₁₀₃	425 ⁺³⁸⁵ ₋₁₇₇
3156	1.28 ± 0.61	101.86 ^{+0.09} _{-0.09}	86.04 ^{+0.10} _{-0.10}	76 ⁺⁴⁵ ₋₃₇	97 ⁺⁷² ₋₃₂	118 ⁺⁴⁶ ₋₅₉	94 ⁺⁵⁴ ₋₄₅
3159	0.81 [†]	75.86 ^{+0.12} _{-0.12}	60.99 ^{+0.12} _{-0.12}	54 ⁺³² ₋₂₇	73 ⁺⁴³ ₋₂₅	94 ⁺³⁶ ₋₅₁	69 ⁺⁴² ₋₃₅
3160	7.71 [†]	320.75 ^{+0.08} _{-0.08}	328.38 ^{+0.09} _{-0.09}	273 ⁺²⁶³ ₋₁₀₀	336 ⁺⁵²¹ ₋₁₀₄	295 ⁺²²⁵ ₋₉₅	351 ⁺²⁹⁵ ₋₁₄₅
3164	31.00 ± 9.62	780.19 ^{+1.31} _{-1.31}	927.10 ^{+1.84} _{-1.84}	643 ⁺⁹⁵⁰ ₋₁₉₈	845 ⁺¹⁷³⁹ ₋₂₈₄	577 ⁺⁷²⁸ ₋₁₆₁	874 ⁺¹⁰²⁸ ₋₄₀₀
3166	0.86 [†]	79.19 ^{+0.11} _{-0.11}	64.12 ^{+0.11} _{-0.11}	57 ⁺³³ ₋₂₉	76 ⁺⁴⁷ ₋₂₆	97 ⁺³⁷ ₋₅₂	72 ⁺⁴³ ₋₃₇
3167	0.93 [†]	82.77 ^{+0.11} _{-0.11}	67.53 ^{+0.11} _{-0.11}	60 ⁺³⁵ ₋₃₀	79 ⁺⁵⁰ ₋₂₇	101 ⁺³⁸ ₋₅₃	75 ⁺⁴⁵ ₋₃₈
3168	3.28 ± 2.01	185.81 ^{+0.04} _{-0.04}	173.58 ^{+0.04} _{-0.04}	151 ⁺¹⁰⁸ ₋₆₅	184 ⁺²⁰⁹ ₋₅₈	191 ⁺⁹⁹ ₋₈₀	187 ⁺¹²⁴ ₋₈₀
3171	17.60 ± 2.16	543.44 ^{+0.48} _{-0.48}	607.78 ^{+0.63} _{-0.63}	461 ⁺⁵⁸⁸ ₋₁₄₉	591 ⁺¹¹²² ₋₁₈₉	443 ⁺⁴⁷⁰ ₋₁₂₅	617 ⁺⁶⁴⁴ ₋₂₆₇
3173	29.80 ± 2.26	760.77 ^{+1.23} _{-1.23}	900.20 ^{+1.72} _{-1.71}	628 ⁺⁹²¹ ₋₁₉₄	825 ⁺¹⁶⁹¹ ₋₂₇₆	567 ⁺⁷⁰⁷ ₋₁₅₈	854 ⁺⁹⁹⁷ ₋₃₈₉
3174	7.00 ± 1.76	301.56 ^{+0.06} _{-0.06}	305.55 ^{+0.07} _{-0.07}	256 ⁺²³⁹ ₋₉₆	314 ⁺⁴⁷² ₋₉₇	281 ⁺²⁰⁵ ₋₉₂	328 ⁺²⁶⁷ ₋₁₃₅
3177	2.15 ± 0.52	141.87 ^{+0.06} _{-0.06}	126.67 ^{+0.07} _{-0.07}	111 ⁺⁷¹ ₋₅₁	137 ⁺¹³⁰ ₋₄₄	154 ⁺⁶⁸ ₋₆₁	137 ⁺⁸³ ₋₆₁
3178	15.80 ± 0.21	507.25 ^{+0.39} _{-0.39}	560.79 ^{+0.50} _{-0.50}	432 ⁺⁵³³ ₋₁₄₂	550 ⁺¹⁰²³ ₋₁₇₅	420 ⁺⁴²⁹ ₋₁₂₀	575 ⁺⁵⁸⁵ ₋₂₄₇
3193	1.89 ± 0.43	130.65 ^{+0.07} _{-0.07}	115.06 ^{+0.07} _{-0.07}	101 ⁺⁶³ ₋₄₇	126 ⁺¹¹² ₋₄₁	144 ⁺⁶¹ ₋₅₇	125 ⁺⁷⁴ ₋₅₇
3212	3.05 ± 0.36	177.37 ^{+0.04} _{-0.04}	164.42 ^{+0.05} _{-0.05}	143 ⁺¹⁰¹ ₋₆₂	175 ⁺¹⁹³ ₋₅₅	184 ⁺⁹³ ₋₇₅	177 ⁺¹¹⁵ ₋₇₆
3215	12.60 ± 1.27	438.97 ^{+0.24} _{-0.24}	473.68 ^{+0.30} _{-0.30}	375 ⁺⁴³⁰ ₋₁₂₇	472 ⁺⁸³⁶ ₋₁₄₈	376 ⁺³⁵³ ₋₁₁₀	495 ⁺⁴⁷⁵ ₋₂₀₉
3217	3.21 ± 0.54	183.26 ^{+0.04} _{-0.04}	170.81 ^{+0.04} _{-0.04}	148 ⁺¹⁰⁶ ₋₆₄	181 ⁺²⁰⁴ ₋₅₇	189 ⁺⁹⁷ ₋₇₆	184 ⁺¹²¹ ₋₇₉
3218	62.60 ± 25.00	1222.29 ^{+3.73} _{-3.72}	1565.98 ^{+5.70} _{-5.68}	937 ⁺¹⁵⁴⁹ ₋₂₉₃	1263 ⁺²⁶⁸⁹ ₋₄₅₆	786 ⁺¹¹³⁶ ₋₂₃₈	1281 ⁺¹⁷⁰¹ ₋₆₂₄
3220	7.50 ± 0.84	315.14 ^{+0.07} _{-0.07}	321.68 ^{+0.08} _{-0.08}	268 ⁺²⁵⁶ ₋₉₉	330 ⁺⁵⁰⁶ ₋₁₀₂	291 ⁺²¹⁹ ₋₉₄	344 ⁺²⁸⁷ ₋₁₄₂
3227*	5.58 ± 0.09	—	—	219 ⁺¹⁸⁸ ₋₈₆	268 ⁺³⁷³ ₋₈₇	250 ⁺¹⁶⁵ ₋₁₁₅	278 ⁺²¹² ₋₁₁₅
3229	2.17 ± 1.59	142.71 ^{+0.06} _{-0.06}	127.55 ^{+0.07} _{-0.07}	112 ⁺⁵¹ ₋₄₄	138 ⁺¹³¹ ₋₄₄	154 ⁺⁶⁹ ₋₆₈	138 ⁺⁸³ ₋₆₂
3237	1.83 ± 0.29	127.99 ^{+0.07} _{-0.07}	112.33 ^{+0.08} _{-0.08}	99 ⁺⁶¹ ₋₄₆	123 ⁺¹⁰⁸ ₋₄₀	142 ⁺⁶⁰ ₋₆₅	122 ⁺⁷² ₋₅₆
3238	1.57 ± 0.85	116.05 ^{+0.08} _{-0.08}	100.19 ^{+0.09} _{-0.09}	88 ⁺⁵³ ₋₄₂	111 ⁺⁹¹ ₋₃₆	131 ⁺⁵³ ₋₆₂	109 ⁺⁶³ ₋₅₁
3241	3.03 ± 0.07	176.63 ^{+0.04} _{-0.04}	163.62 ^{+0.05} _{-0.05}	142 ⁺¹⁰⁰ ₋₆₂	174 ⁺¹⁹¹ ₋₅₅	183 ⁺⁹² ₋₇₄	177 ⁺¹¹⁴ ₋₇₆
3242	0.42 ± 0.12	50.21 ^{+0.14} _{-0.14}	37.67 ^{+0.13} _{-0.13}	34 ⁺²² ₋₁₈	51 ⁺²³ ₋₁₈	70 ⁺³⁰ ₋₄₂	46 ⁺³⁴ ₋₂₆
3245*	9.41 ± 0.06	—	—	311 ⁺³²³ ₋₁₁₁	386 ⁺⁶³⁴ ₋₁₂₀	326 ⁺²⁷¹ ₋₁₀₁	404 ⁺³⁵⁹ ₋₁₆₈

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
3246	1.60 ± 0.31	$117.47^{+0.08}_{-0.08}$	$101.62^{+0.08}_{-0.08}$	89^{+54}_{-42}	112^{+93}_{-37}	132^{+54}_{-63}	110^{+64}_{-51}
3247*	7.67 ± 0.43	—	—	272^{+262}_{-100}	335^{+518}_{-104}	294^{+224}_{-95}	350^{+293}_{-144}
3248	50.20 ± 22.20	$1061.53^{+2.73}_{-2.72}$	$1328.24^{+4.07}_{-4.06}$	836^{+1347}_{-258}	1120^{+2375}_{-394}	716^{+1000}_{-210}	1142^{+1464}_{-547}
3255*	1.28 ± 0.08	—	—	76^{+45}_{-37}	97^{+72}_{-32}	118^{+46}_{-59}	94^{+54}_{-45}
3256	0.75 ± 0.19	$72.64^{+0.12}_{-0.12}$	$57.98^{+0.12}_{-0.12}$	51^{+30}_{-26}	70^{+40}_{-24}	91^{+35}_{-50}	66^{+40}_{-34}
3257	2.81 ± 0.19	$168.33^{+0.05}_{-0.05}$	$154.67^{+0.05}_{-0.05}$	135^{+93}_{-59}	165^{+176}_{-52}	176^{+86}_{-73}	167^{+106}_{-72}
3259	6.07 ± 0.45	$275.31^{+0.05}_{-0.05}$	$274.73^{+0.05}_{-0.05}$	232^{+206}_{-89}	284^{+407}_{-88}	261^{+179}_{-89}	295^{+231}_{-122}
3266	15.10 ± 7.11	$492.78^{+0.36}_{-0.36}$	$542.15^{+0.45}_{-0.45}$	420^{+511}_{-139}	534^{+983}_{-169}	411^{+413}_{-118}	558^{+562}_{-239}
3267	2.83 ± 0.97	$169.09^{+0.04}_{-0.04}$	$155.49^{+0.05}_{-0.05}$	136^{+93}_{-59}	166^{+177}_{-73}	177^{+87}_{-73}	168^{+107}_{-79}
3269	22.80 ± 1.31	$641.17^{+0.78}_{-0.78}$	$737.23^{+1.05}_{-1.05}$	539^{+739}_{-169}	698^{+1384}_{-228}	501^{+579}_{-139}	727^{+803}_{-323}
3273	1.60 ± 0.35	$117.47^{+0.08}_{-0.08}$	$101.62^{+0.08}_{-0.08}$	89^{+54}_{-42}	112^{+93}_{-37}	132^{+54}_{-63}	110^{+64}_{-51}
3276	6.20 ± 1.50	$279.06^{+0.05}_{-0.05}$	$279.10^{+0.05}_{-0.05}$	235^{+210}_{-90}	288^{+416}_{-89}	264^{+183}_{-90}	300^{+236}_{-124}
3278	49.20 ± 21.70	$1047.97^{+2.65}_{-2.65}$	$1308.45^{+3.94}_{-3.93}$	827^{+1329}_{-255}	1107^{+2347}_{-389}	709^{+988}_{-207}	1130^{+1444}_{-540}
3279	0.66 ± 0.46	$66.91^{+0.12}_{-0.12}$	$52.67^{+0.12}_{-0.12}$	47^{+28}_{-12}	65^{+35}_{-23}	86^{+38}_{-48}	61^{+38}_{-32}
3280	2.30^{\dagger}	$148.11^{+0.06}_{-0.06}$	$133.21^{+0.06}_{-0.06}$	117^{+76}_{-53}	144^{+140}_{-46}	159^{+72}_{-69}	144^{+88}_{-64}
3282	10.80 ± 3.82	$397.81^{+0.17}_{-0.17}$	$422.23^{+0.21}_{-0.21}$	340^{+370}_{-133}	425^{+724}_{-105}	349^{+307}_{-105}	445^{+411}_{-186}
3283	3.13 ± 0.52	$180.33^{+0.04}_{-0.04}$	$167.63^{+0.04}_{-0.04}$	146^{+103}_{-63}	178^{+198}_{-56}	186^{+95}_{-75}	181^{+118}_{-78}
3284	6.29 ± 5.12	$281.64^{+0.05}_{-0.05}$	$282.12^{+0.05}_{-0.05}$	238^{+213}_{-91}	291^{+423}_{-90}	266^{+185}_{-125}	303^{+240}_{-125}
3286	257.00^{\dagger}	$3012.91^{+21.49}_{-21.34}$	$4490.46^{+38.58}_{-38.25}$	1833^{+2784}_{-681}	2435^{+4927}_{-1003}	1354^{+1989}_{-521}	2402^{+4043}_{-1197}
3287*	3.92 ± 0.17	—	—	171^{+130}_{-71}	209^{+254}_{-65}	209^{+118}_{-90}	214^{+148}_{-90}
3290*	1.83 ± 0.10	—	—	99^{+61}_{-46}	123^{+108}_{-40}	142^{+60}_{-56}	122^{+72}_{-56}
3292	5.27 ± 1.12	$251.54^{+0.04}_{-0.04}$	$247.24^{+0.04}_{-0.04}$	211^{+178}_{-83}	257^{+351}_{-80}	243^{+156}_{-86}	266^{+200}_{-110}
3293	5.20^{\dagger}	$249.40^{+0.04}_{-0.04}$	$244.79^{+0.04}_{-0.04}$	209^{+175}_{-83}	255^{+154}_{-79}	241^{+197}_{-86}	264^{+197}_{-109}
3294	37.40 ± 7.31	$879.57^{+1.76}_{-1.76}$	$1066.41^{+2.53}_{-2.53}$	713^{+1096}_{-219}	946^{+1977}_{-323}	628^{+829}_{-178}	973^{+1185}_{-454}
3296	18.70 ± 9.15	$564.90^{+0.54}_{-0.54}$	$635.90^{+0.71}_{-0.71}$	479^{+621}_{-154}	615^{+1180}_{-198}	456^{+494}_{-128}	642^{+679}_{-279}
3297	15.80 ± 3.98	$507.25^{+0.39}_{-0.39}$	$560.79^{+0.50}_{-0.50}$	432^{+533}_{-142}	550^{+1023}_{-175}	420^{+429}_{-120}	575^{+585}_{-247}
3299	1.06 ± 0.48	$90.30^{+0.10}_{-0.10}$	$74.75^{+0.11}_{-0.11}$	66^{+39}_{-33}	86^{+58}_{-29}	108^{+41}_{-56}	83^{+48}_{-41}
3301*	15.10 ± 0.62	—	—	420^{+511}_{-139}	534^{+983}_{-169}	411^{+413}_{-118}	558^{+562}_{-239}
3303	1.64 ± 0.16	$119.33^{+0.08}_{-0.08}$	$103.51^{+0.08}_{-0.08}$	91^{+55}_{-37}	114^{+95}_{-52}	134^{+55}_{-52}	112^{+65}_{-52}
3306	1.74 ± 0.15	$123.93^{+0.07}_{-0.07}$	$108.18^{+0.08}_{-0.08}$	95^{+58}_{-45}	119^{+102}_{-39}	138^{+62}_{-64}	117^{+69}_{-54}
3307	1.85 ± 0.82	$128.88^{+0.07}_{-0.07}$	$113.24^{+0.08}_{-0.08}$	99^{+62}_{-46}	124^{+109}_{-40}	142^{+60}_{-56}	123^{+72}_{-56}
3308	10.40 ± 6.56	$388.33^{+0.16}_{-0.16}$	$410.51^{+0.19}_{-0.19}$	332^{+356}_{-116}	414^{+699}_{-129}	342^{+297}_{-104}	434^{+396}_{-181}
3319	4.41 ± 1.00	$224.49^{+0.03}_{-0.03}$	$216.48^{+0.04}_{-0.04}$	186^{+147}_{-76}	227^{+289}_{-71}	222^{+132}_{-82}	233^{+167}_{-97}
3320	1.74 ± 0.18	$123.93^{+0.07}_{-0.07}$	$108.18^{+0.08}_{-0.08}$	95^{+58}_{-45}	119^{+102}_{-39}	138^{+57}_{-54}	117^{+69}_{-54}
3321	7.95 ± 2.12	$327.10^{+0.08}_{-0.08}$	$335.97^{+0.10}_{-0.10}$	278^{+272}_{-102}	344^{+537}_{-106}	299^{+231}_{-96}	359^{+304}_{-148}
3322	2.95 ± 1.47	$173.64^{+0.04}_{-0.04}$	$160.38^{+0.05}_{-0.05}$	140^{+97}_{-61}	171^{+185}_{-54}	181^{+90}_{-74}	173^{+111}_{-75}
3323	28.30 ± 7.72	$736.08^{+1.13}_{-1.13}$	$866.18^{+1.57}_{-1.56}$	610^{+884}_{-189}	800^{+1629}_{-266}	554^{+681}_{-154}	828^{+957}_{-376}
3324	2.74 ± 1.85	$165.64^{+0.05}_{-0.05}$	$151.79^{+0.05}_{-0.05}$	132^{+90}_{-58}	162^{+171}_{-51}	174^{+84}_{-72}	164^{+104}_{-71}
3325	10.40 ± 5.70	$388.33^{+0.16}_{-0.16}$	$410.51^{+0.19}_{-0.19}$	332^{+356}_{-116}	414^{+699}_{-129}	342^{+297}_{-104}	434^{+396}_{-181}
3328	5.54 ± 1.99	$259.70^{+0.04}_{-0.04}$	$256.63^{+0.04}_{-0.04}$	218^{+187}_{-85}	266^{+370}_{-83}	249^{+164}_{-87}	276^{+211}_{-114}
3330*	13.60 ± 0.42	—	—	394^{+463}_{-132}	497^{+896}_{-157}	391^{+377}_{-113}	521^{+510}_{-221}
3333	4.80 ± 3.31	$236.97^{+0.03}_{-0.03}$	$230.60^{+0.04}_{-0.04}$	197^{+161}_{-79}	241^{+317}_{-84}	232^{+143}_{-84}	249^{+182}_{-103}
3335	28.90 ± 12.80	$746.01^{+1.17}_{-1.17}$	$879.84^{+1.63}_{-1.62}$	618^{+899}_{-191}	810^{+1654}_{-270}	559^{+692}_{-156}	839^{+973}_{-381}
3336	2.98 ± 0.30	$174.76^{+0.04}_{-0.04}$	$161.60^{+0.05}_{-0.05}$	141^{+98}_{-61}	172^{+188}_{-54}	181^{+91}_{-74}	174^{+112}_{-75}
3337	2.56 ± 1.25	$158.60^{+0.05}_{-0.05}$	$144.29^{+0.06}_{-0.06}$	126^{+84}_{-56}	155^{+158}_{-49}	168^{+79}_{-71}	156^{+97}_{-68}
3338	1.89^{\dagger}	$130.65^{+0.07}_{-0.07}$	$115.06^{+0.07}_{-0.07}$	101^{+63}_{-47}	126^{+112}_{-41}	144^{+61}_{-57}	125^{+74}_{-57}
3339	17.30 ± 3.64	$537.51^{+0.47}_{-0.47}$	$600.04^{+0.61}_{-0.61}$	457^{+579}_{-148}	584^{+1106}_{-187}	439^{+463}_{-124}	610^{+634}_{-264}
3340	7.71 ± 2.22	$320.75^{+0.08}_{-0.08}$	$328.38^{+0.09}_{-0.09}$	273^{+263}_{-100}	336^{+521}_{-104}	295^{+295}_{-95}	351^{+295}_{-145}
3342	55.80 ± 19.40	$1135.72^{+3.18}_{-3.17}$	$1437.26^{+4.79}_{-4.77}$	883^{+1443}_{-274}	1187^{+2524}_{-423}	749^{+1064}_{-223}	1207^{+1575}_{-583}

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
3345*	4.08 ± 0.20	—	—	176 ⁺¹³⁶ ₋₇₃	215 ⁺²⁶⁶ ₋₆₇	213 ⁺¹²² ₋₈₀	220 ⁺¹⁵⁴ ₋₉₂
3347	2.79 ± 0.72	167.56 ^{+0.05} _{-0.05}	153.85 ^{+0.05} _{-0.05}	134 ⁺⁹² ₋₅₉	164 ⁺¹⁷⁴ ₋₅₂	175 ⁺⁸⁶ ₋₇₃	166 ⁺¹⁰⁵ ₋₇₂
3349	6.19 ± 2.02	278.77 ^{+0.05} _{-0.05}	278.77 ^{+0.05} _{-0.05}	235 ⁺²¹⁰ ₋₉₀	288 ⁺⁴¹⁶ ₋₈₉	264 ⁺¹⁸² ₋₁₂₄	300 ⁺²³⁶ ₋₁₂₄
3350	8.14 ± 2.01	332.07 ^{+0.09} _{-0.09}	341.94 ^{+0.10} _{-0.10}	283 ⁺²⁷⁸ ₋₁₀₃	349 ⁺⁵⁵⁰ ₋₁₀₈	303 ⁺²³⁷ ₋₉₆	365 ⁺³¹¹ ₋₁₅₁
3351	2.04 ± 0.35	137.19 ^{+0.06} _{-0.06}	121.81 ^{+0.07} _{-0.07}	107 ⁺⁶⁸ ₋₄₉	132 ⁺¹²² ₋₄₃	150 ⁺⁶⁵ ₋₆₇	132 ⁺⁷⁹ ₋₅₉
3352*	1.51 ± 0.14	—	—	86 ⁺⁵¹ ₋₄₁	108 ⁺⁸⁷ ₋₃₆	128 ⁺⁵² ₋₆₂	106 ⁺⁶¹ ₋₅₀
3356	1.11 ± 0.34	93.00 ^{+0.10} _{-0.10}	77.36 ^{+0.10} _{-0.10}	68 ⁺⁴⁰ ₋₃₄	89 ⁺⁶² ₋₃₀	110 ⁺⁴² ₋₅₆	85 ⁺⁴⁹ ₋₄₂
3357	32.90 ± 9.07	810.41 ^{+1.44} _{-1.44}	969.16 ^{+2.04} _{-2.03}	664 ⁺⁹⁹⁵ ₋₂₀₄	876 ⁺¹⁸¹³ ₋₂₉₆	593 ⁺⁷⁵⁹ ₋₁₆₆	905 ⁺¹⁰⁷⁶ ₋₄₁₆
3358	2.21 ± 0.72	144.38 ^{+0.06} _{-0.06}	129.30 ^{+0.06} _{-0.06}	113 ⁺⁷³ ₋₅₂	140 ⁺¹³⁴ ₋₄₅	156 ⁺⁷⁰ ₋₆₈	140 ⁺⁸⁵ ₋₆₂
3359	10.30 ± 2.56	385.94 ^{+0.16} _{-0.16}	407.56 ^{+0.19} _{-0.19}	330 ⁺³⁵³ ₋₁₁₅	411 ⁺⁶⁹² ₋₁₂₈	341 ⁺³⁹² ₋₁₀₃	431 ⁺³⁹² ₋₁₈₀
3360*	35.70 ± 1.20	—	—	695 ⁺¹⁰⁵⁹ ₋₂₁₃	920 ⁺¹⁹¹⁶ ₋₃₁₃	615 ⁺⁸⁰³ ₋₁₇₃	948 ⁺¹¹⁴⁵ ₋₄₄₀
3364	5.49 ± 0.82	258.20 ^{+0.04} _{-0.04}	254.90 ^{+0.04} _{-0.04}	217 ⁺¹⁸⁵ ₋₈₅	265 ⁺³⁶⁶ ₋₈₂	240 ⁺¹⁶³ ₋₈₇	274 ⁺²⁰⁹ ₋₁₁₄
3366	1.45 ± 0.07	110.31 ^{+0.08} _{-0.08}	94.42 ^{+0.09} _{-0.09}	83 ⁺⁵⁰ ₋₄₀	105 ⁺⁸³ ₋₃₅	126 ⁺⁵⁰ ₋₆₁	103 ⁺⁵⁹ ₋₄₉
3369	0.46 ± 0.22	53.27 ^{+0.14} _{-0.13}	40.36 ^{+0.13} _{-0.13}	36 ⁺²³ ₋₁₉	53 ⁺²⁵ ₋₁₉	73 ⁺³¹ ₋₄₃	49 ⁺³⁵ ₋₂₇
3370	4.32 ± 1.93	221.55 ^{+0.03} _{-0.03}	213.17 ^{+0.04} _{-0.04}	183 ⁺¹⁴⁴ ₋₇₅	223 ⁺²⁸³ ₋₇₀	219 ⁺¹²⁹ ₋₈₂	230 ⁺¹⁶³ ₋₉₆
3374	14.30 ± 5.71	475.94 ^{+0.32} _{-0.32}	520.58 ^{+0.40} _{-0.40}	406 ⁺⁴⁸⁵ ₋₁₆₃	515 ⁺⁹³⁷ ₋₁₆₃	400 ⁺³⁹⁴ ₋₁₁₅	539 ⁺⁵³⁴ ₋₂₂₉
3378	25.90 ± 8.10	695.56 ^{+0.97} _{-0.97}	810.78 ^{+1.33} _{-1.33}	580 ⁺⁸²² ₋₁₈₀	757 ⁺¹⁵²⁶ ₋₂₅₀	531 ⁺⁶³⁸ ₋₁₄₈	786 ⁺⁸⁹² ₋₃₅₃
3379	7.28 ± 2.25	309.21 ^{+0.07} _{-0.07}	314.62 ^{+0.08} _{-0.08}	262 ⁺²⁴⁸ ₋₉₈	323 ⁺⁴⁹¹ ₋₁₀₀	280 ⁺²¹³ ₋₁₃₉	337 ⁺²⁷⁸ ₋₁₃₉
3384	6.17 ± 5.23	278.20 ^{+0.05} _{-0.05}	278.10 ^{+0.05} _{-0.05}	235 ⁺²⁰⁹ ₋₉₀	287 ⁺⁴¹⁴ ₋₈₉	263 ⁺¹⁸² ₋₈₉	299 ⁺²³⁵ ₋₁₂₃
3403	1.32 ± 0.42	103.88 ^{+0.09} _{-0.09}	88.04 ^{+0.09} _{-0.09}	77 ⁺⁴⁶ ₋₃₈	99 ⁺⁷⁵ ₋₃₃	120 ⁺⁴⁷ ₋₅₉	96 ⁺⁵⁶ ₋₄₆
3405	32.10 ± 2.65	797.77 ^{+1.38} _{-1.38}	951.53 ^{+1.95} _{-1.95}	655 ⁺⁹⁷⁶ ₋₂₀₂	864 ⁺¹⁷⁸² ₋₂₉₁	587 ⁺⁷⁴⁶ ₋₁₆₄	892 ⁺¹⁰⁵⁶ ₋₄₁₀
3406	0.52 ± 0.31	57.43 ^{+0.13} _{-0.13}	44.07 ^{+0.13} _{-0.12}	39 ⁺²⁴ ₋₂₀	57 ⁺²⁸ ₋₂₀	77 ⁺³¹ ₋₄₅	52 ⁺³⁶ ₋₂₉
3407	3.27 ± 0.78	185.44 ^{+0.04} _{-0.04}	173.19 ^{+0.04} _{-0.04}	150 ⁺¹⁰⁸ ₋₆₄	184 ⁺²⁰⁸ ₋₅₈	190 ⁺⁹⁹ ₋₇₆	187 ⁺¹²³ ₋₈₀
3408*	6.40 ± 0.08	—	—	240 ⁺²¹⁷ ₋₉₂	295 ⁺⁴³⁰ ₋₉₁	268 ⁺¹⁸⁸ ₋₉₀	307 ⁺²⁴⁴ ₋₁₂₇
3410*	2.23 ± 0.13	—	—	114 ⁺⁷⁴ ₋₅₂	141 ⁺¹³⁵ ₋₄₅	157 ⁺⁷⁰ ₋₆₉	141 ⁺⁸⁵ ₋₆₃
3412	14.00 ± 0.44	469.53 ^{+0.31} _{-0.31}	512.41 ^{+0.38} _{-0.38}	401 ⁺⁴⁷⁶ ₋₁₃₄	507 ⁺⁹²⁰ ₋₁₆₀	396 ⁺³⁸⁷ ₋₁₁₄	531 ⁺⁵²⁴ ₋₂₂₆
3415*	2.55 ± 0.09	—	—	126 ⁺⁸⁴ ₋₅₆	154 ⁺¹⁵⁷ ₋₄₉	168 ⁺⁹⁷ ₋₇₁	155 ⁺⁹⁷ ₋₆₈
3416	1.99 ± 1.04	135.03 ^{+0.07} _{-0.07}	119.57 ^{+0.07} _{-0.07}	105 ⁺⁶⁶ ₋₄₈	130 ⁺¹¹⁹ ₋₄₂	148 ⁺⁶⁴ ₋₆₆	129 ⁺⁷⁷ ₋₅₈
3436	5.14 ± 0.44	247.56 ^{+0.04} _{-0.04}	242.68 ^{+0.04} _{-0.04}	207 ⁺⁸² ₋₈₂	253 ⁺¹⁷³ ₋₇₈	240 ⁺⁸³ ₋₈₅	261 ⁺¹⁹⁵ ₋₁₀₈
3437	54.90 [†]	1123.98 ^{+3.10} _{-3.09}	1419.93 ^{+4.67} _{-4.66}	876 ⁺¹⁴²⁸ ₋₂₇₂	1176 ⁺²⁵⁰¹ ₋₄₁₈	744 ⁺¹⁰⁵⁴ ₋₂₂₁	1197 ⁺¹⁵⁵⁷ ₋₅₇₈
3439	3.03 ± 0.55	176.63 ^{+0.04} _{-0.04}	163.62 ^{+0.05} _{-0.05}	142 ⁺¹⁰⁰ ₋₆₂	174 ⁺¹⁹¹ ₋₅₅	183 ⁺⁹² ₋₇₆	177 ⁺¹¹⁴ ₋₇₆
3440	3.11 ± 0.62	179.60 ^{+0.04} _{-0.04}	166.83 ^{+0.04} _{-0.04}	145 ⁺¹⁰³ ₋₆₃	177 ⁺¹⁹⁷ ₋₅₆	183 ⁺⁹⁵ ₋₇₅	180 ⁺¹¹⁷ ₋₇₇
3441	6.85 [†]	297.41 ^{+0.06} _{-0.06}	300.65 ^{+0.07} _{-0.07}	252 ⁺²³³ ₋₉₅	309 ⁺⁴⁶² ₋₉₆	278 ⁺²⁰¹ ₋₉₂	323 ⁺²⁶² ₋₁₃₃
3448	5.77 ± 0.26	266.54 ^{+0.04} _{-0.04}	264.53 ^{+0.05} _{-0.05}	224 ⁺¹⁹⁵ ₋₈₇	274 ⁺³⁸⁶ ₋₈₅	254 ⁺¹⁷⁰ ₋₈₈	285 ⁺²²⁰ ₋₁₁₈
3458*	5.44 ± 0.13	—	—	215 ⁺¹⁸⁴ ₋₈₄	263 ⁺³⁶³ ₋₈₁	247 ⁺¹⁶¹ ₋₈₇	273 ⁺²⁰⁷ ₋₁₁₃
3464*	5.13 ± 0.32	—	—	207 ⁺¹⁷³ ₋₈₂	252 ⁺³⁴¹ ₋₇₈	240 ⁺¹⁵² ₋₈₅	261 ⁺¹⁹⁵ ₋₁₀₈
3465	26.70 ± 7.89	709.21 ^{+1.02} _{-1.02}	829.38 ^{+1.41} _{-1.41}	590 ⁺⁸⁴³ ₋₁₈₃	771 ⁺¹⁵⁶¹ ₋₂₅₅	539 ⁺⁶⁵³ ₋₁₅₀	800 ⁺⁹¹⁴ ₋₃₆₁
3466	1.92 ± 0.80	131.98 ^{+0.07} _{-0.07}	116.42 ^{+0.07} _{-0.07}	102 ⁺⁶⁴ ₋₄₇	127 ⁺¹¹⁴ ₋₄₁	145 ⁺⁷⁵ ₋₆₆	126 ⁺⁷⁵ ₋₅₇
3467	2.71 ± 0.56	164.48 ^{+0.05} _{-0.05}	150.55 ^{+0.05} _{-0.05}	131 ⁺⁸⁹ ₋₅₈	161 ⁺¹⁶⁹ ₋₅₁	173 ⁺⁸³ ₋₇₂	163 ⁺¹⁰² ₋₇₁
3471	8.26 ± 2.79	335.19 ^{+0.09} _{-0.09}	345.70 ^{+0.11} _{-0.11}	285 ⁺²⁸³ ₋₁₀₄	353 ⁺⁵⁵⁸ ₋₁₀₉	305 ⁺²⁴⁰ ₋₉₇	369 ⁺³¹⁶ ₋₁₅₃
3472	2.07 ± 0.59	138.47 ^{+0.06} _{-0.06}	123.14 ^{+0.07} _{-0.07}	108 ⁺⁶⁹ ₋₅₀	134 ⁺¹²⁴ ₋₄₃	151 ⁺⁶⁶ ₋₆₇	133 ⁺⁸⁰ ₋₆₀
3476	63.10 ± 50.70	1228.51 ^{+3.77} _{-3.76}	1575.30 ^{+5.77} _{-5.75}	941 ⁺¹⁵⁵⁷ ₋₂₉₅	1268 ⁺²⁷⁰⁰ ₋₄₅₈	789 ⁺¹¹⁴¹ ₋₂₄₀	1286 ⁺¹⁷¹⁰ ₋₆₂₇
3477	14.20 ± 10.20	473.81 ^{+0.31} _{-0.31}	517.86 ^{+0.40} _{-0.40}	404 ⁺⁴⁸² ₋₁₃₅	512 ⁺⁹³¹ ₋₁₆₂	399 ⁺³⁹² ₋₁₁₅	536 ⁺⁵³¹ ₋₂₂₈
3480*	8.75 ± 0.23	—	—	296 ⁺³⁰⁰ ₋₁₀₇	367 ⁺⁵⁹¹ ₋₁₁₄	314 ⁺²⁵³ ₋₉₈	384 ⁺³³⁴ ₋₁₅₉
3481*	7.71 ± 0.15	—	—	273 ⁺²⁶³ ₋₁₀₀	336 ⁺⁵²¹ ₋₁₀₄	295 ⁺²²⁵ ₋₉₅	351 ⁺²⁹⁵ ₋₁₄₅
3485	0.79 ± 0.17	75.08 ^{+0.12} _{-0.12}	60.26 ^{+0.12} _{-0.12}	53 ⁺³¹ ₋₂₇	72 ⁺⁴³ ₋₂₅	94 ⁺³⁶ ₋₅₁	68 ⁺⁴¹ ₋₃₅
3486	1.26 ± 0.43	100.84 ^{+0.09} _{-0.09}	85.03 ^{+0.10} _{-0.10}	75 ⁺⁴⁴ ₋₃₇	96 ⁺⁷¹ ₋₃₂	117 ⁺⁴⁶ ₋₅₈	93 ⁺⁵⁴ ₋₄₅
3487	33.80 ± 20.90	824.50 ^{+1.50} _{-1.50}	988.87 ^{+2.13} _{-2.13}	674 ⁺¹⁰¹⁶ ₋₂₀₇	891 ⁺¹⁸⁴⁷ ₋₃₀₁	600 ⁺⁷⁷⁴ ₋₁₆₃	919 ⁺¹⁰⁹⁹ ₋₄₂₁
3488	4.49 ± 0.61	227.08 ^{+0.03} _{-0.03}	219.40 ^{+0.04} _{-0.04}	188 ⁺¹⁵⁰ ₋₇₆	230 ⁺²⁹⁵ ₋₇₁	224 ⁺¹⁷⁴ ₋₈₂	237 ⁺¹⁷⁰ ₋₉₉

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
3489*	6.62 ± 0.17	—	—	246 ⁺²²⁵ ₋₉₃	302 ⁺⁴⁴⁶ ₋₉₃	273 ⁺¹⁹⁴ ₋₉₁	315 ⁺²⁵³ ₋₁₃₀
3491*	3.60 ± 0.05	—	—	161 ⁺¹¹⁹ ₋₆₈	196 ⁺²³² ₋₆₁	200 ⁺¹⁰⁸ ₋₇₈	201 ⁺¹³⁶ ₋₈₅
3492*	8.43 ± 0.08	—	—	289 ⁺²⁸⁹ ₋₁₀₅	358 ⁺⁵⁶⁹ ₋₁₁₁	308 ⁺²⁴⁴ ₋₉₇	374 ⁺¹⁵⁵ ₋₃₂₂
3493	21.10 ± 5.16	610.20 ^{+0.68} _{-0.68}	695.83 ^{+0.91} _{-0.90}	514 ⁺⁶⁹¹ ₋₁₆₃	665 ⁺¹³⁰² ₋₂₁₆	483 ⁺⁵⁴⁴ ₋₁₃₄	693 ⁺⁷⁵³ ₋₃₀₅
3494	8.01 ± 5.91	328.67 ^{+0.09} _{-0.09}	337.86 ^{+0.10} _{-0.10}	280 ⁺²⁷⁴ ₋₁₀₂	345 ⁺⁵⁴¹ ₋₁₀₇	300 ⁺²³³ ₋₉₆	361 ⁺³⁰⁶ ₋₁₄₉
3502	19.60 ± 4.34	582.12 ^{+0.59} _{-0.59}	658.59 ^{+0.78} _{-0.78}	492 ⁺⁶⁴⁸ ₋₁₅₇	634 ⁺¹²²⁶ ₋₂₀₄	466 ⁺⁵¹³ ₋₁₃₀	661 ⁺⁷⁰⁷ ₋₂₈₉
3503	1.43 ± 0.48	109.33 ^{+0.09} _{-0.09}	93.45 ^{+0.09} _{-0.09}	82 ⁺⁴⁹ ₋₄₀	104 ⁺⁸² ₋₃₅	125 ⁺⁵⁰ ₋₆₁	102 ⁺⁵⁹ ₋₄₈
3505	3.07 [†]	178.12 ^{+0.04} _{-0.04}	165.23 ^{+0.05} _{-0.05}	144 ⁺¹⁰¹ ₋₆₂	176 ⁺¹⁹⁴ ₋₅₅	184 ⁺⁹³ ₋₇₅	178 ⁺¹¹⁶ ₋₇₇
3509	2.28 ± 0.42	147.29 ^{+0.06} _{-0.06}	132.34 ^{+0.06} _{-0.06}	116 ⁺⁷⁵ ₋₅₂	143 ⁺¹³⁹ ₋₆₉	158 ⁺⁷² ₋₆₉	143 ⁺⁸⁷ ₋₆₃
3510	5.95 ± 4.78	271.82 ^{+0.05} _{-0.05}	270.67 ^{+0.05} _{-0.05}	229 ⁺¹⁵⁷ ₋₈₈	280 ⁺³⁹⁹ ₋₈₇	258 ⁺¹⁷⁶ ₋₈₉	291 ⁺²²⁷ ₋₁₂₀
3511	0.47 ± 0.36	53.56 ^{+0.13} _{-0.13}	40.62 ^{+0.13} _{-0.13}	36 ⁺²³ ₋₁₉	54 ⁺²⁵ ₋₁₉	73 ⁺³¹ ₋₄₃	49 ⁺³⁵ ₋₂₇
3512	5.04 ± 0.36	244.47 ^{+0.04} _{-0.04}	239.15 ^{+0.04} _{-0.04}	204 ⁺¹⁶⁹ ₋₈₁	249 ⁺³³⁴ ₋₇₇	237 ⁺¹⁵⁰ ₋₈₅	258 ⁺¹⁹¹ ₋₁₀₇
3514	3.75 ± 0.69	202.40 ^{+0.03} _{-0.03}	191.82 ^{+0.04} _{-0.04}	166 ⁺¹²⁴ ₋₆₉	202 ⁺²⁴² ₋₆₃	204 ⁺¹¹³ ₋₇₉	207 ⁺¹⁴¹ ₋₈₇
3515	1.64 ± 0.75	119.33 ^{+0.08} _{-0.08}	103.51 ^{+0.08} _{-0.08}	91 ⁺⁵⁵ ₋₄₃	114 ⁺⁹⁵ ₋₃₇	134 ⁺⁵⁵ ₋₆₃	112 ⁺⁶⁵ ₋₅₂
3516	6.09 ± 0.47	275.89 ^{+0.05} _{-0.05}	275.40 ^{+0.05} _{-0.05}	233 ⁺²⁰⁶ ₋₈₉	285 ⁺⁴⁰⁹ ₋₈₈	261 ⁺¹⁸⁰ ₋₈₉	296 ⁺²³² ₋₁₂₂
3523	28.60 ± 0.17	741.05 ^{+1.15} _{-1.15}	873.02 ^{+1.60} _{-1.59}	614 ⁺¹⁶⁴² ₋₁₉₀	805 ⁺¹⁶⁴² ₋₁₅₅	556 ⁺⁶⁸⁷ ₋₁₅₅	834 ⁺⁹⁶⁵ ₋₃₇₈
3527	2.55 ± 0.55	158.20 ^{+0.05} _{-0.05}	143.87 ^{+0.06} _{-0.06}	126 ⁺⁸⁴ ₋₅₆	154 ⁺¹⁵⁷ ₋₄₉	168 ⁺⁷⁹ ₋₇₁	155 ⁺⁹⁷ ₋₆₈
3528	0.96 [†]	84.54 ^{+0.11} _{-0.11}	69.21 ^{+0.11} _{-0.11}	61 ⁺³⁶ ₋₃₁	81 ⁺⁵² ₋₂₈	102 ⁺³⁹ ₋₅₄	77 ⁺⁴⁵ ₋₃₉
3530	4.82 ± 1.72	237.60 ^{+0.03} _{-0.03}	231.32 ^{+0.04} _{-0.04}	198 ⁺¹⁶² ₋₇₉	241 ⁺³¹⁹ ₋₇₅	232 ⁺¹⁴³ ₋₁₀₄	249 ⁺¹⁸³ ₋₁₀₄
3545	30.90 ± 5.85	778.59 ^{+1.30} _{-1.30}	924.87 ^{+1.83} _{-1.82}	641 ⁺⁹⁴⁸ ₋₁₉₈	844 ⁺¹⁷³⁵ ₋₂₈₃	576 ⁺⁷²⁶ ₋₁₆₁	872 ⁺¹⁰²⁵ ₋₃₉₉
3552	0.66 ± 0.56	66.65 ^{+0.12} _{-0.12}	52.44 ^{+0.12} _{-0.12}	46 ⁺²⁸ ₋₂₄	65 ⁺³⁵ ₋₂₃	86 ⁺³³ ₋₃₂	60 ⁺³⁸ ₋₃₂
3567	5.31 ± 0.73	252.76 ^{+0.04} _{-0.04}	248.64 ^{+0.04} _{-0.04}	212 ⁺¹⁷⁹ ₋₈₃	258 ⁺³⁵³ ₋₈₀	244 ⁺¹⁵⁷ ₋₅₃	268 ⁺²⁰² ₋₁₁₁
3569	1.57 ± 0.36	116.05 ^{+0.08} _{-0.08}	100.19 ^{+0.09} _{-0.09}	88 ⁺⁵³ ₋₄₂	111 ⁺⁹¹ ₋₃₆	131 ⁺⁵³ ₋₆₂	109 ⁺⁶³ ₋₅₁
3588	0.73 ± 0.21	71.34 ^{+0.12} _{-0.12}	56.77 ^{+0.12} _{-0.12}	50 ⁺³⁰ ₋₂₆	69 ⁺³⁹ ₋₂₄	90 ⁺³⁵ ₋₅₀	65 ⁺⁴⁰ ₋₃₄
3593*	16.00 ± 0.38	—	—	435 ⁺⁵³⁹ ₋₁₄₂	555 ⁺¹⁰³⁴ ₋₁₇₇	423 ⁺⁴³⁴ ₋₁₂₀	580 ⁺⁵⁹² ₋₂₄₉
3598	3.72 ± 0.42	201.37 ^{+0.03} _{-0.03}	190.67 ^{+0.04} _{-0.04}	165 ⁺¹²³ ₋₆₉	201 ⁺²⁴⁰ ₋₆₃	203 ⁺¹¹² ₋₇₈	206 ⁺¹⁴⁰ ₋₈₇
3606	16.10 ± 1.70	513.38 ^{+0.41} _{-0.41}	568.71 ^{+0.52} _{-0.52}	437 ⁺⁵⁴² ₋₁₄₃	557 ⁺¹⁰⁴⁰ ₋₁₇₇	424 ⁺⁴³⁶ ₋₁₂₀	583 ⁺⁵⁹⁵ ₋₂₅₀
3608	2.81 ± 0.48	168.33 ^{+0.05} _{-0.05}	154.67 ^{+0.05} _{-0.05}	135 ⁺⁹³ ₋₅₉	165 ⁺¹⁷⁶ ₋₅₂	176 ⁺⁸⁶ ₋₇₃	167 ⁺¹⁰⁶ ₋₇₂
3611	3.50 ± 2.16	193.67 ^{+0.04} _{-0.04}	182.20 ^{+0.04} _{-0.04}	158 ⁺¹¹⁶ ₋₆₇	193 ⁺¹⁰⁴ ₋₇₇	197 ⁺⁷⁷ ₋₈₃	197 ⁺¹³² ₋₈₃
3618	5.21 ± 0.34	249.71 ^{+0.04} _{-0.04}	245.14 ^{+0.04} _{-0.04}	209 ⁺¹⁷⁵ ₋₈₃	255 ⁺³⁴⁶ ₋₇₉	242 ⁺¹⁵⁵ ₋₈₆	264 ⁺¹⁹⁸ ₋₁₀₉
3634*	7.18 ± 0.45	—	—	260 ⁺²⁴⁵ ₋₉₇	320 ⁺⁴⁸⁴ ₋₉₉	284 ⁺²¹⁰ ₋₉₃	334 ⁺²⁷⁴ ₋₁₃₈
3637	2.01 ± 0.23	135.89 ^{+0.06} _{-0.06}	120.47 ^{+0.07} _{-0.07}	106 ⁺⁶⁷ ₋₄₉	131 ⁺¹²⁰ ₋₄₂	148 ⁺⁶⁴ ₋₆₇	130 ⁺⁷⁸ ₋₅₉
3639	3.28 ± 2.94	185.81 ^{+0.04} _{-0.04}	173.58 ^{+0.04} _{-0.04}	151 ⁺¹⁰⁸ ₋₆₅	184 ⁺²⁰⁹ ₋₅₈	191 ⁺⁹⁹ ₋₇₆	187 ⁺¹²⁴ ₋₈₀
3640	3.50 ± 1.65	193.67 ^{+0.04} _{-0.04}	182.20 ^{+0.04} _{-0.04}	158 ⁺¹¹⁶ ₋₆₇	193 ⁺²²⁴ ₋₆₀	197 ⁺¹⁰⁶ ₋₇₇	197 ⁺¹³² ₋₈₃
3642	7.69 ± 1.23	320.22 ^{+0.08} _{-0.08}	327.74 ^{+0.09} _{-0.09}	272 ⁺²⁶³ ₋₁₀₀	336 ⁺⁵¹⁹ ₋₁₀₄	294 ⁺²²⁴ ₋₉₅	351 ⁺²⁹⁴ ₋₁₄₅
3643	2.20 ± 1.97	143.97 ^{+0.06} _{-0.06}	128.86 ^{+0.06} _{-0.06}	113 ⁺⁷³ ₋₅₁	139 ⁺¹³³ ₋₄₅	155 ⁺⁶⁹ ₋₆₈	139 ⁺⁸⁴ ₋₆₂
3644	3.21 ± 0.39	183.26 ^{+0.04} _{-0.04}	170.81 ^{+0.04} _{-0.04}	148 ⁺¹⁰⁶ ₋₆₄	181 ⁺²⁰⁴ ₋₅₇	189 ⁺⁹⁷ ₋₇₆	184 ⁺¹²¹ ₋₇₉
3647	1.20 ± 0.43	97.75 ^{+0.10} _{-0.10}	81.99 ^{+0.10} _{-0.10}	72 ⁺⁴² ₋₃₅	93 ⁺⁶⁷ ₋₃₁	115 ⁺⁴⁴ ₋₅₈	90 ⁺⁵² ₋₄₄
3648	2.00 ± 0.13	135.46 ^{+0.06} _{-0.06}	120.02 ^{+0.07} _{-0.07}	105 ⁺⁶⁶ ₋₄₉	131 ⁺¹²⁰ ₋₄₂	148 ⁺⁶⁴ ₋₆₇	130 ⁺⁷⁷ ₋₅₉
3649	3.52 ± 1.09	194.38 ^{+0.04} _{-0.04}	182.97 ^{+0.04} _{-0.04}	159 ⁺¹¹⁷ ₋₆₇	193 ⁺²²⁶ ₋₆₁	198 ⁺¹⁰⁶ ₋₇₇	197 ⁺¹³³ ₋₈₄
3652	2.35 ± 2.26	150.16 ^{+0.06} _{-0.06}	135.36 ^{+0.06} _{-0.06}	118 ⁺⁷⁸ ₋₅₃	146 ⁺¹⁴⁴ ₋₄₇	161 ⁺⁷³ ₋₇₀	146 ⁺⁹⁰ ₋₆₅
3654	4.31 ± 0.38	221.22 ^{+0.03} _{-0.03}	212.80 ^{+0.04} _{-0.04}	183 ⁺¹⁴⁴ ₋₇₅	223 ⁺²⁸² ₋₆₉	219 ⁺¹²⁹ ₋₈₁	230 ⁺¹⁶³ ₋₉₆
3655	4.52 ± 1.02	228.05 ^{+0.03} _{-0.03}	220.49 ^{+0.04} _{-0.04}	189 ⁺¹⁵¹ ₋₇₇	231 ⁺²⁹⁷ ₋₇₂	225 ⁺¹³⁵ ₋₈₂	238 ⁺¹⁷¹ ₋₉₉
3658*	5.40 ± 0.12	—	—	214 ⁺¹⁸² ₋₈₄	262 ⁺³⁶⁰ ₋₈₁	246 ⁺¹⁶⁰ ₋₁₁₂	271 ⁺²⁰⁵ ₋₁₁₂
3662	13.80 ± 0.65	465.24 ^{+0.30} _{-0.30}	506.94 ^{+0.37} _{-0.37}	397 ⁺⁴⁶⁹ ₋₁₃₃	502 ⁺⁹⁰⁸ ₋₁₅₉	393 ⁺³⁸² ₋₁₁₄	526 ⁺⁵¹⁷ ₋₂₂₃
3663*	5.13 ± 0.32	—	—	207 ⁺¹⁷³ ₋₈₂	252 ⁺³⁴¹ ₋₇₈	240 ⁺¹⁵² ₋₈₅	261 ⁺¹⁹⁵ ₋₁₀₈
3664	0.56 ± 0.34	60.41 ^{+0.13} _{-0.13}	46.75 ^{+0.12} _{-0.12}	41 ⁺²⁶ ₋₂₂	59 ⁺³⁰ ₋₂₁	80 ⁺³² ₋₄₆	55 ⁺³⁶ ₋₃₀
3665	46.20 ± 5.27	1006.69 ^{+2.42} _{-2.41}	1248.47 ^{+3.57} _{-3.56}	800 ⁺¹²⁷⁴ ₋₂₄₆	1069 ⁺²²⁶⁰ ₋₃₇₃	690 ⁺⁹⁵⁰ ₋₂₀₀	1093 ⁺¹³⁸¹ ₋₅₂₀
3668	109.00 ± 14.30	1741.92 ^{+7.74} _{-7.70}	2368.31 ^{+12.61} _{-12.55}	1234 ⁺²⁰⁷⁸ ₋₄₁₀	1670 ⁺³⁵¹² ₋₆₃₉	986 ⁺¹⁴⁸⁷ ₋₃₃₁	1670 ⁺²⁴²¹ ₋₈₃₉

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
3671	16.00 ± 2.83	511.34 ^{+0.40} _{-0.40}	566.08 ^{+0.51} _{-0.51}	435 ⁺⁵³⁹ ₋₁₄₂	555 ⁺¹⁰³⁴ ₋₁₇₇	423 ⁺⁴³⁴ ₋₁₂₀	580 ⁺⁵⁹² ₋₂₄₉
3717	0.67 ± 0.32	67.36 ^{+0.12} _{-0.12}	53.09 ^{+0.12} _{-0.12}	47 ⁺²⁸ ₋₂₄	65 ⁺³⁶ ₋₂₃	86 ⁺³⁴ ₋₄₈	61 ⁺³⁹ ₋₃₂
3722	6.30 ± 1.95	281.93 ^{+0.05} _{-0.05}	282.46 ^{+0.05} _{-0.05}	238 ⁺²¹⁴ ₋₉₁	292 ⁺⁴²³ ₋₉₀	266 ⁺¹⁸⁵ ₋₉₀	304 ⁺²⁴⁰ ₋₁₂₅
3728	4.48 ± 3.43	226.76 ^{+0.03} _{-0.03}	219.03 ^{+0.04} _{-0.04}	188 ⁺¹⁵⁰ ₋₇₆	229 ⁺²⁹⁴ ₋₇₁	224 ⁺¹³⁴ ₋₈₂	236 ⁺¹⁶⁹ ₋₉₉
3733	1.49 [†]	112.24 ^{+0.08} _{-0.08}	96.36 ^{+0.09} _{-0.09}	85 ⁺⁵¹ ₋₄₁	107 ⁺⁸⁶ ₋₃₅	128 ⁺⁵¹ ₋₆₁	105 ⁺⁶¹ ₋₄₉
3735	49.70 ± 5.01	1054.76 ^{+2.69} _{-2.68}	1318.36 ^{+4.00} _{-3.99}	831 ⁺¹³³⁸ ₋₂₅₇	1113 ⁺²³⁶¹ ₋₃₉₂	712 ⁺⁹⁹⁴ ₋₂₀₈	1136 ⁺¹⁴⁵⁴ ₋₅₄₄
3736*	20.90 ± 1.05	—	—	512 ⁺⁶⁸⁵ ₋₁₆₂	661 ⁺¹²⁹² ₋₂₁₄	481 ⁺⁵⁴⁰ ₋₁₃₄	688 ⁺⁷⁴⁷ ₋₃₀₃
3737	21.90 ± 4.45	624.88 ^{+0.73} _{-0.72}	715.42 ^{+0.97} _{-0.97}	526 ⁺⁷¹⁴ ₋₁₆₆	681 ⁺¹³⁴¹ ₋₂₂₁	491 ⁺⁵⁶¹ ₋₁₃₇	709 ⁺⁷⁷⁷ ₋₃₁₃
3740	0.57 [†]	60.48 ^{+0.13} _{-0.13}	46.81 ^{+0.12} _{-0.12}	42 ⁺²⁶ ₋₂₂	60 ⁺³⁰ ₋₂₁	80 ⁺³² ₋₄₆	55 ⁺³⁷ ₋₃₀
3742	91.80 ± 55.10	1560.94 ^{+6.21} _{-6.19}	2083.56 ^{+9.94} _{-9.89}	1135 ⁺¹⁹¹⁵ ₋₃₆₉	1537 ⁺³²⁵³ ₋₅₇₈	921 ⁺¹³⁷⁸ ₋₂₉₉	1543 ⁺²¹⁷⁷ ₋₇₇₀
3745	1.62 ± 0.44	118.40 ^{+0.08} _{-0.08}	102.56 ^{+0.08} _{-0.08}	90 ⁺⁵⁵ ₋₄₃	113 ⁺⁹⁴ ₋₃₇	133 ⁺⁵⁴ ₋₆₃	111 ⁺⁶⁵ ₋₅₂
3751	15.20 ± 3.11	494.86 ^{+0.36} _{-0.36}	544.83 ^{+0.46} _{-0.46}	422 ⁺⁵¹⁴ ₋₁₃₉	536 ⁺⁹⁸⁹ ₋₁₇₀	412 ⁺⁴¹⁵ ₋₁₁₈	561 ⁺⁵⁶⁵ ₋₂₄₀
3765*	3.65 ± 0.08	—	—	163 ⁺¹²¹ ₋₆₈	198 ⁺²³⁵ ₋₆₂	201 ⁺¹¹⁰ ₋₇₈	203 ⁺¹³⁸ ₋₈₆
3766	3.42 ± 1.04	190.83 ^{+0.04} _{-0.04}	179.08 ^{+0.04} _{-0.04}	155 ⁺¹¹³ ₋₆₆	189 ⁺²¹⁹ ₋₅₉	195 ⁺¹⁰³ ₋₇₇	193 ⁺¹²⁹ ₋₈₂
3768	0.62 ± 0.50	63.84 ^{+0.13} _{-0.13}	49.86 ^{+0.12} _{-0.12}	44 ⁺²⁷ ₋₂₃	62 ⁺³³ ₋₂₂	83 ⁺³³ ₋₄₇	58 ⁺³⁷ ₋₃₁
3770	18.50 ± 2.68	561.04 ^{+0.53} _{-0.53}	630.82 ^{+0.70} _{-0.70}	476 ⁺⁶¹⁵ ₋₁₉₆	610 ⁺¹¹⁶⁹ ₋₁₂₇	453 ⁺⁴⁹⁰ ₋₂₇₇	637 ⁺⁶⁷³ ₋₂₇₇
3771	3.43 ± 0.77	191.19 ^{+0.04} _{-0.04}	179.47 ^{+0.04} _{-0.04}	156 ⁺¹¹⁴ ₋₆₆	190 ⁺²²⁰ ₋₆₀	195 ⁺¹⁰⁴ ₋₈₂	194 ⁺¹²⁹ ₋₈₂
3772	9.07 ± 1.38	355.83 ^{+0.12} _{-0.12}	370.68 ^{+0.13} _{-0.13}	304 ⁺³¹¹ ₋₁₀₉	377 ⁺⁶¹² ₋₁₁₇	320 ⁺²⁶² ₋₁₀₀	394 ⁺³⁴⁶ ₋₁₆₃
3773	2.94 ± 1.07	173.26 ^{+0.04} _{-0.04}	159.98 ^{+0.05} _{-0.05}	139 ⁺⁹⁷ ₋₆₁	170 ⁺¹⁸⁵ ₋₅₄	180 ⁺⁹⁰ ₋₇₄	173 ⁺¹¹¹ ₋₇₄
3774	1.29 [†]	102.37 ^{+0.09} _{-0.09}	86.54 ^{+0.10} _{-0.10}	76 ⁺⁴⁵ ₋₃₇	98 ⁺⁷³ ₋₃₃	119 ⁺⁴⁶ ₋₅₉	95 ⁺⁵⁵ ₋₄₅
3776	2.13 ± 0.15	141.02 ^{+0.06} _{-0.06}	125.79 ^{+0.07} _{-0.07}	110 ⁺⁷¹ ₋₅₀	136 ⁺¹²⁸ ₋₄₄	153 ⁺⁶⁸ ₋₆₈	136 ⁺⁸² ₋₆₁
3779	1.08 ± 0.67	91.38 ^{+0.10} _{-0.10}	75.80 ^{+0.10} _{-0.10}	67 ⁺³⁹ ₋₃₃	87 ⁺⁶⁰ ₋₂₉	109 ⁺⁴² ₋₅₆	84 ⁺⁴⁹ ₋₄₁
3782	1.88 ± 1.65	130.21 ^{+0.07} _{-0.07}	114.61 ^{+0.07} _{-0.07}	101 ⁺⁶³ ₋₄₇	125 ⁺¹¹¹ ₋₄₁	144 ⁺⁶¹ ₋₆₅	124 ⁺⁷³ ₋₅₆
3788*	3.42 ± 0.10	—	—	155 ⁺¹¹³ ₋₆₆	189 ⁺²¹⁹ ₋₅₉	195 ⁺¹⁰³ ₋₇₇	193 ⁺¹²⁹ ₋₈₂
3789	3.67 ± 0.58	199.63 ^{+0.04} _{-0.04}	188.76 ^{+0.04} _{-0.04}	163 ⁺¹²² ₋₆₉	199 ⁺²³⁷ ₋₆₂	202 ⁺¹¹⁰ ₋₇₈	204 ⁺¹³⁸ ₋₈₆
3791	43.80 ± 8.48	972.96 ^{+2.24} _{-2.23}	1199.77 ^{+3.28} _{-3.27}	777 ⁺¹²²⁸ ₋₂₃₉	1037 ⁺²¹⁸⁷ ₋₃₆₀	674 ⁺⁹¹⁹ ₋₁₉₄	1062 ⁺¹³³⁰ ₋₅₀₂
3792	1.12 [†]	93.53 ^{+0.10} _{-0.10}	77.88 ^{+0.10} _{-0.10}	69 ⁺⁴⁰ ₋₃₄	89 ⁺⁶² ₋₃₀	111 ⁺⁴² ₋₅₆	86 ⁺⁵⁰ ₋₄₂
3799	2.69 ± 2.36	163.70 ^{+0.05} _{-0.05}	149.72 ^{+0.05} _{-0.05}	131 ⁺⁸⁹ ₋₅₈	160 ⁺¹⁶⁷ ₋₅₁	172 ⁺⁸³ ₋₇₂	162 ⁺¹⁰² ₋₇₀
3800	0.99 [†]	86.28 ^{+0.11} _{-0.11}	70.87 ^{+0.11} _{-0.11}	62 ⁺³⁷ ₋₃₁	83 ⁺⁵⁴ ₋₂₈	104 ⁺⁴⁰ ₋₅₄	79 ⁺⁴⁶ ₋₃₉
3801	2.44 ± 1.00	153.81 ^{+0.05} _{-0.05}	139.21 ^{+0.06} _{-0.06}	122 ⁺⁸¹ ₋₅₅	150 ⁺¹⁵⁰ ₋₄₈	164 ⁺⁷⁰ ₋₇₀	150 ⁺⁹³ ₋₆₆
3805	2.60 ± 0.75	160.18 ^{+0.05} _{-0.05}	145.97 ^{+0.05} _{-0.05}	128 ⁺⁸⁶ ₋₅₇	156 ⁺¹⁶¹ ₋₅₀	169 ⁺⁸⁰ ₋₇₁	158 ⁺⁹⁹ ₋₆₉
3807	6.49 ± 1.62	287.33 ^{+0.05} _{-0.05}	288.78 ^{+0.06} _{-0.06}	243 ⁺²²¹ ₋₉₂	298 ⁺⁴³⁷ ₋₉₂	270 ⁺¹⁹¹ ₋₉₁	310 ⁺²⁴⁸ ₋₁₂₈
3810	24.30 ± 9.81	667.80 ^{+0.87} _{-0.87}	773.12 ^{+1.19} _{-1.18}	559 ⁺⁷⁸⁰ ₋₁₇₅	727 ⁺¹⁴⁵⁴ ₋₂₃₉	516 ⁺⁶⁰⁸ ₋₁₄₃	756 ⁺⁸⁴⁷ ₋₃₃₈
3811	0.64 ± 0.17	65.35 ^{+0.13} _{-0.13}	51.24 ^{+0.12} _{-0.12}	45 ⁺²⁷ ₋₂₃	64 ⁺³⁴ ₋₂₂	84 ⁺³³ ₋₄₈	59 ⁺³⁸ ₋₃₂
3814	1.73 ± 0.84	123.48 ^{+0.07} _{-0.07}	107.72 ^{+0.08} _{-0.08}	95 ⁺⁵⁸ ₋₄₄	119 ⁺¹⁰¹ ₋₃₉	138 ⁺⁵⁷ ₋₆₄	117 ⁺⁶⁸ ₋₅₄
3815	0.56 ± 0.21	60.28 ^{+0.13} _{-0.13}	46.63 ^{+0.12} _{-0.12}	41 ⁺²⁶ ₋₂₂	59 ⁺³⁰ ₋₂₁	80 ⁺³² ₋₄₆	55 ⁺³⁶ ₋₃₀
3819	0.92 ± 0.51	82.37 ^{+0.11} _{-0.11}	67.14 ^{+0.11} _{-0.11}	59 ⁺³⁵ ₋₃₀	79 ⁺⁵⁰ ₋₂₇	100 ⁺³⁸ ₋₅₃	75 ⁺⁴⁴ ₋₃₈
3840	1.22 [†]	98.78 ^{+0.10} _{-0.10}	83.01 ^{+0.10} _{-0.10}	73 ⁺⁴³ ₋₃₆	94 ⁺⁶⁸ ₋₃₂	116 ⁺⁴⁵ ₋₅₈	91 ⁺⁵³ ₋₄₄
3843	3.09 ± 0.22	178.86 ^{+0.04} _{-0.04}	166.03 ^{+0.05} _{-0.05}	144 ⁺¹⁰² ₋₆₂	176 ⁺¹⁹⁵ ₋₅₆	183 ⁺⁹⁴ ₋₇₅	179 ⁺¹¹⁶ ₋₇₇
3853	4.05 ± 1.50	212.60 ^{+0.03} _{-0.03}	203.15 ^{+0.04} _{-0.04}	175 ⁺¹³⁵ ₋₇₂	213 ⁺²⁶⁴ ₋₆₇	212 ⁺¹²¹ ₋₈₀	219 ⁺¹⁵³ ₋₉₂
3860*	22.40 ± 0.43	—	—	533 ⁺⁷²⁸ ₋₁₆₈	691 ⁺¹³⁶⁵ ₋₂₂₅	497 ⁺⁵⁷¹ ₋₁₃₈	719 ⁺⁷⁹² ₋₃₁₈
3864	38.70 ± 6.35	898.98 ^{+1.86} _{-1.85}	1093.94 ^{+2.68} _{-2.67}	727 ⁺¹¹²⁴ ₋₂₂₃	965 ⁺²⁰²¹ ₋₃₃₁	638 ⁺⁸⁴⁸ ₋₁₈₁	992 ⁺¹²¹⁶ ₋₄₆₄
3866	7.77 ± 0.58	322.35 ^{+0.08} _{-0.08}	330.28 ^{+0.09} _{-0.09}	274 ⁺²⁶⁶ ₋₁₀₁	338 ⁺⁵²⁵ ₋₁₀₅	296 ⁺¹⁸¹ ₋₉₅	353 ⁺²⁹⁷ ₋₁₄₆
3867	23.80 ± 3.51	658.99 ^{+0.84} _{-0.84}	761.22 ^{+1.14} _{-1.14}	552 ⁺⁷⁶⁶ ₋₁₇₃	718 ⁺¹⁴³¹ ₋₂₃₅	511 ⁺⁵⁹⁸ ₋₁₄₂	746 ⁺⁸³² ₋₃₃₃
3868	9.05 ± 4.13	355.33 ^{+0.11} _{-0.11}	370.07 ^{+0.13} _{-0.13}	303 ⁺³¹⁰ ₋₁₀₉	376 ⁺⁶¹¹ ₋₁₁₇	319 ⁺²⁶¹ ₋₉₉	394 ⁺³⁴⁶ ₋₁₆₃
3869	2.50 ± 0.74	156.22 ^{+0.05} _{-0.05}	141.76 ^{+0.06} _{-0.06}	124 ⁺⁸² ₋₅₅	152 ⁺¹⁵⁴ ₋₄₈	166 ⁺⁷⁸ ₋₇₁	153 ⁺⁹⁵ ₋₆₇
3870*	3.26 ± 0.16	—	—	150 ⁺¹⁰⁸ ₋₆₄	183 ⁺²⁰⁷ ₋₅₈	190 ⁺⁹⁹ ₋₈₀	187 ⁺¹²³ ₋₈₀
3871	5.28 ± 1.06	251.85 ^{+0.04} _{-0.04}	247.59 ^{+0.04} _{-0.04}	211 ⁺¹⁷⁸ ₋₈₃	257 ⁺³⁵¹ ₋₈₀	243 ⁺¹⁵⁷ ₋₈₆	267 ⁺²⁰¹ ₋₁₁₀
3875	0.70 ± 0.23	69.46 ^{+0.12} _{-0.12}	55.03 ^{+0.12} _{-0.12}	49 ⁺²⁹ ₋₂₅	67 ⁺³⁸ ₋₂₃	88 ⁺³⁴ ₋₄₉	63 ⁺³⁹ ₋₃₃

Continued on next page

Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
3879	1.34 ± 0.29	104.89 ^{+0.09} _{-0.09}	89.03 ^{+0.09} _{-0.09}	78 ⁺⁴⁶ ₋₃₈	100 ⁺⁷⁶ ₋₃₃	121 ⁺⁴⁷ ₋₅₉	97 ⁺⁵⁶ ₋₄₆
3886	3.54 ± 0.79	195.09 ^{+0.04} _{-0.04}	183.75 ^{+0.04} _{-0.04}	159 ⁺¹¹⁷ ₋₆₇	194 ⁺²²⁷ ₋₆₁	198 ⁺¹⁰⁷ ₋₇₇	198 ⁺¹³³ ₋₈₄
3888	18.60 ± 3.56	562.97 ^{+0.54} _{-0.54}	633.36 ^{+0.70} _{-0.70}	477 ⁺⁶¹⁸ ₋₁₅₃	613 ⁺¹¹⁷⁵ ₋₁₉₇	455 ⁺⁴⁹² ₋₁₂₇	640 ⁺⁶⁷⁶ ₋₂₇₈
3889	21.00 ± 5.07	608.35 ^{+0.67} _{-0.67}	693.37 ^{+0.90} _{-0.90}	513 ⁺⁶⁸⁸ ₋₁₆₂	663 ⁺¹²⁹⁷ ₋₂₁₅	482 ⁺⁵⁴² ₋₁₃₄	691 ⁺⁷⁵⁰ ₋₃₀₄
3890	1.38 ± 0.69	106.87 ^{+0.09} _{-0.09}	91.00 ^{+0.09} _{-0.09}	80 ⁺⁴⁸ ₋₃₉	102 ⁺⁷⁹ ₋₃₄	123 ⁺⁴⁸ ₋₆₀	99 ⁺⁵⁷ ₋₄₇
3891*	3.79 ± 0.31	—	—	167 ⁺¹²⁶ ₋₇₀	204 ⁺²⁴⁵ ₋₆₄	205 ⁺¹¹⁴ ₋₈₈	209 ⁺¹⁴³ ₋₈₈
3892	1.96 ± 0.51	133.73 ^{+0.07} _{-0.07}	118.23 ^{+0.07} _{-0.07}	104 ⁺⁶⁵ ₋₄₈	129 ⁺¹¹⁷ ₋₄₂	147 ⁺⁶³ ₋₆₆	128 ⁺⁷⁶ ₋₅₈
3893	2.17 ± 0.09	142.71 ^{+0.06} _{-0.06}	127.55 ^{+0.07} _{-0.07}	112 ⁺⁷² ₋₅₁	138 ⁺¹³¹ ₋₄₄	154 ⁺⁶⁹ ₋₆₂	138 ⁺⁸³ ₋₆₂
3894	10.40 ± 6.23	388.33 ^{+0.16} _{-0.16}	410.51 ^{+0.19} _{-0.19}	332 ⁺³⁵⁶ ₋₁₁₆	414 ⁺⁶⁹⁹ ₋₁₂₉	342 ⁺²⁹⁷ ₋₁₀₄	434 ⁺³⁹⁶ ₋₁₈₁
3895	4.57 ± 4.10	229.65 ^{+0.03} _{-0.03}	222.31 ^{+0.04} _{-0.04}	191 ⁺¹⁵³ ₋₇₇	232 ⁺³⁰¹ ₋₇₂	226 ⁺¹³⁶ ₋₈₃	240 ⁺¹⁷³ ₋₁₀₀
3899	4.51 ± 2.03	227.72 ^{+0.03} _{-0.03}	220.13 ^{+0.04} _{-0.04}	189 ⁺¹⁵¹ ₋₇₇	230 ⁺²⁹⁷ ₋₇₂	224 ⁺¹³⁵ ₋₈₂	237 ⁺¹⁷¹ ₋₉₉
3900	0.95 ± 0.56	84.14 ^{+0.11} _{-0.11}	68.83 ^{+0.11} _{-0.11}	61 ⁺³⁶ ₋₃₀	81 ⁺⁵² ₋₂₇	102 ⁺³⁹ ₋₅₄	77 ⁺⁴⁵ ₋₃₉
3901	1.12 ± 0.76	93.53 ^{+0.10} _{-0.10}	77.88 ^{+0.10} _{-0.10}	69 ⁺⁴⁰ ₋₃₄	89 ⁺⁶² ₋₃₀	111 ⁺⁴² ₋₅₆	86 ⁺⁵⁰ ₋₄₂
3902	26.10 ± 2.25	698.99 ^{+0.98} _{-0.98}	815.44 ^{+1.35} _{-1.35}	583 ⁺⁸²⁷ ₋₁₈₁	761 ⁺¹⁵³⁵ ₋₂₅₁	533 ⁺⁶⁴² ₋₁₄₈	789 ⁺⁸⁹⁷ ₋₃₅₅
3903	5.77 ± 2.29	266.54 ^{+0.04} _{-0.04}	264.53 ^{+0.05} _{-0.05}	224 ⁺¹⁹⁵ ₋₈₇	274 ⁺³⁸⁶ ₋₈₅	254 ⁺¹⁷⁰ ₋₈₈	285 ⁺²²⁰ ₋₁₁₈
3904	18.40 ± 10.30	559.10 ^{+0.53} _{-0.53}	628.27 ^{+0.69} _{-0.69}	474 ⁺⁶¹² ₋₁₅₂	608 ⁺¹¹⁶⁴ ₋₁₉₅	452 ⁺⁴⁸⁷ ₋₁₂₇	635 ⁺⁶⁶⁹ ₋₂₇₆
3905	4.82 ± 0.28	237.60 ^{+0.03} _{-0.03}	231.32 ^{+0.04} _{-0.04}	198 ⁺¹⁶² ₋₇₉	241 ⁺³¹⁹ ₋₇₅	232 ⁺¹⁴³ ₋₈₄	249 ⁺¹⁸³ ₋₁₀₄
3906	2.37 ± 0.28	150.98 ^{+0.05} _{-0.05}	136.22 ^{+0.06} _{-0.06}	119 ⁺⁷⁸ ₋₅₄	147 ⁺¹⁴⁵ ₋₄₇	161 ⁺⁷⁴ ₋₇₀	147 ⁺⁹⁰ ₋₆₅
3908	4.75 ± 2.89	235.39 ^{+0.03} _{-0.03}	228.81 ^{+0.04} _{-0.04}	196 ⁺¹⁵⁹ ₋₇₉	239 ⁺³¹⁴ ₋₇₄	230 ⁺¹⁴¹ ₋₈₄	247 ⁺¹⁸⁰ ₋₁₀₃
3909	1.41 ± 0.33	108.35 ^{+0.09} _{-0.09}	92.47 ^{+0.09} _{-0.09}	81 ⁺⁴⁹ ₋₃₉	104 ⁺⁸⁰ ₋₃₄	124 ⁺⁴⁹ ₋₆₀	101 ⁺⁵⁸ ₋₄₈
3910	1.31 [†]	103.38 ^{+0.09} _{-0.09}	87.54 ^{+0.10} _{-0.10}	77 ⁺⁴⁶ ₋₃₇	99 ⁺⁷⁴ ₋₃₃	120 ⁺⁴⁷ ₋₅₉	96 ⁺⁵⁵ ₋₄₆
3912	2.71 ± 0.21	164.48 ^{+0.05} _{-0.05}	150.55 ^{+0.05} _{-0.05}	131 ⁺⁸⁹ ₋₇₁	161 ⁺¹⁶⁹ ₋₅₁	173 ⁺⁸³ ₋₇₂	163 ⁺¹⁰² ₋₇₂
3913	2.81 ± 0.22	168.33 ^{+0.05} _{-0.05}	154.67 ^{+0.05} _{-0.05}	135 ⁺⁹³ ₋₅₉	165 ⁺¹⁷⁶ ₋₅₂	176 ⁺⁸⁶ ₋₇₃	167 ⁺¹⁰⁶ ₋₇₂
3914	1.52 ± 1.23	113.68 ^{+0.08} _{-0.08}	97.80 ^{+0.09} _{-0.09}	86 ⁺⁵² ₋₄₁	109 ⁺⁸⁸ ₋₃₆	129 ⁺⁵² ₋₆₂	106 ⁺⁶² ₋₅₀
3916	2.15 ± 0.33	141.87 ^{+0.06} _{-0.06}	126.67 ^{+0.07} _{-0.07}	111 ⁺⁷¹ ₋₅₁	137 ⁺¹³⁰ ₋₄₄	154 ⁺⁶⁸ ₋₆₈	137 ⁺⁸³ ₋₆₁
3917*	15.10 ± 1.21	—	—	420 ⁺⁵¹¹ ₋₁₃₉	534 ⁺⁹⁸³ ₋₁₆₉	411 ⁺⁴¹³ ₋₁₁₈	558 ⁺⁵⁶² ₋₂₃₉
3918*	5.36 ± 0.42	—	—	213 ⁺¹⁸¹ ₋₈₄	260 ⁺³⁵⁷ ₋₈₁	245 ⁺¹⁵⁹ ₋₈₆	270 ⁺²⁰⁴ ₋₁₁₂
3919	4.21 ± 3.57	217.93 ^{+0.03} _{-0.03}	209.11 ^{+0.04} _{-0.04}	180 ⁺¹⁴⁰ ₋₇₄	219 ⁺²⁷⁵ ₋₆₈	217 ⁺¹²⁶ ₋₈₁	226 ⁺¹⁵⁹ ₋₉₄
3921	38.60 ± 6.64	897.50 ^{+1.85} _{-1.85}	1091.83 ^{+2.67} _{-2.66}	726 ⁺¹¹²² ₋₂₂₃	964 ⁺²⁰¹⁸ ₋₃₃₀	637 ⁺⁸⁴⁷ ₋₁₈₁	990 ⁺¹²¹³ ₋₄₆₃
3924	3.54 ± 1.56	195.09 ^{+0.04} _{-0.04}	183.75 ^{+0.04} _{-0.04}	159 ⁺¹¹⁷ ₋₆₇	194 ⁺²²⁷ ₋₆₁	198 ⁺¹⁰⁷ ₋₇₇	198 ⁺¹³³ ₋₈₄
3926	23.80 ± 4.74	658.99 ^{+0.84} _{-0.84}	761.22 ^{+1.14} _{-1.14}	552 ⁺⁷⁶⁶ ₋₁₇₃	718 ⁺¹⁴³¹ ₋₂₃₅	511 ⁺⁵⁹⁸ ₋₁₄₂	746 ⁺⁸³² ₋₃₃₃
3929*	7.62 ± 0.30	—	—	270 ⁺²⁶⁰ ₋₁₀₀	333 ⁺⁵¹⁵ ₋₁₀₃	293 ⁺²²² ₋₉₅	348 ⁺²⁹¹ ₋₁₄₄
3930*	15.50 ± 0.20	—	—	427 ⁺⁵²³ ₋₁₄₀	543 ⁺¹⁰⁰⁶ ₋₁₇₃	416 ⁺⁴²² ₋₁₁₉	568 ⁺⁵⁷⁵ ₋₂₄₃
3935	26.50 ± 4.69	705.81 ^{+1.01} _{-1.01}	824.75 ^{+1.39} _{-1.39}	588 ⁺⁸³⁸ ₋₁₈₃	768 ⁺¹⁵⁵² ₋₂₅₄	537 ⁺⁶⁴⁹ ₋₁₄₉	796 ⁺⁹⁰⁸ ₋₃₅₉
3936	3.29 ± 0.20	186.17 ^{+0.04} _{-0.04}	173.98 ^{+0.04} _{-0.04}	151 ⁺¹⁰⁹ ₋₆₅	184 ⁺²¹⁰ ₋₅₈	191 ⁺¹⁰⁰ ₋₇₆	188 ⁺¹²⁴ ₋₈₀
3939	2.36 ± 0.72	150.57 ^{+0.05} _{-0.05}	135.79 ^{+0.06} _{-0.06}	119 ⁺⁷⁸ ₋₅₄	146 ⁺¹⁴⁴ ₋₄₇	161 ⁺⁷⁰ ₋₇₀	147 ⁺⁹⁰ ₋₆₅
3940	3.71 ± 0.92	201.02 ^{+0.03} _{-0.03}	190.29 ^{+0.04} _{-0.04}	165 ⁺¹²³ ₋₆₉	201 ⁺²³⁹ ₋₆₃	203 ⁺¹¹² ₋₇₈	205 ⁺¹⁴⁰ ₋₈₇
3941	0.77 [†]	73.44 ^{+0.12} _{-0.12}	58.72 ^{+0.12} _{-0.12}	52 ⁺³¹ ₋₂₆	71 ⁺⁴¹ ₋₂₅	92 ⁺³⁵ ₋₅₀	67 ⁺⁴¹ ₋₃₅
3954*	9.11 ± 0.29	—	—	304 ⁺³¹² ₋₁₀₉	378 ⁺⁶¹⁵ ₋₁₁₇	320 ⁺²⁶³ ₋₁₀₀	395 ⁺³⁴⁸ ₋₁₆₄
4039*	21.50 ± 0.55	—	—	520 ⁺⁷⁰² ₋₁₆₄	673 ⁺¹³²¹ ₋₂₁₉	487 ⁺⁵⁵³ ₋₁₃₆	701 ⁺⁷⁶⁵ ₋₃₀₉
4048	8.09 ± 0.35	330.76 ^{+0.09} _{-0.09}	340.38 ^{+0.10} _{-0.10}	281 ⁺²⁷⁷ ₋₁₀₃	348 ⁺⁵⁴⁶ ₋₁₀₈	302 ⁺²³⁵ ₋₉₆	363 ⁺³⁰⁹ ₋₁₅₀
4095	0.93 [†]	82.95 ^{+0.11} _{-0.11}	67.69 ^{+0.11} _{-0.11}	60 ⁺³⁵ ₋₃₀	79 ⁺⁵¹ ₋₂₇	101 ⁺³⁸ ₋₅₈	76 ⁺⁴⁵ ₋₃₈
4146	1.32 ± 0.47	103.88 ^{+0.09} _{-0.09}	88.04 ^{+0.09} _{-0.09}	77 ⁺⁴⁶ ₋₃₈	99 ⁺⁷⁵ ₋₃₃	120 ⁺⁴⁷ ₋₅₉	96 ⁺⁵⁶ ₋₄₆
4157	1.01 ± 0.20	87.56 ^{+0.11} _{-0.11}	72.10 ^{+0.11} _{-0.11}	64 ⁺³⁷ ₋₃₂	84 ⁺⁵⁵ ₋₂₈	105 ⁺⁴⁰ ₋₅₅	80 ⁺⁴⁷ ₋₄₀
4216	3.87 ± 0.71	206.51 ^{+0.03} _{-0.03}	196.38 ^{+0.04} _{-0.04}	170 ⁺¹²⁹ ₋₇₁	207 ⁺²⁵¹ ₋₆₅	207 ⁺¹¹⁶ ₋₇₉	212 ⁺¹⁴⁶ ₋₈₉
4251	0.18 [†]	28.89 ^{+0.14} _{-0.14}	19.75 ^{+0.12} _{-0.12}	19 ⁺¹⁶ ₋₁₀	34 ⁺¹² ₋₁₃	49 ⁺²⁹ ₋₃₃	30 ⁺³³ ₋₁₈
4256	1.44 ± 0.86	109.82 ^{+0.09} _{-0.09}	93.94 ^{+0.09} _{-0.09}	83 ⁺⁴⁹ ₋₄₀	105 ⁺⁸² ₋₃₅	125 ⁺⁵⁰ ₋₆₁	102 ⁺⁵⁹ ₋₄₈
4312	0.96 ± 0.12	84.99 ^{+0.11} _{-0.11}	69.64 ^{+0.11} _{-0.11}	61 ⁺³⁶ ₋₃₁	81 ⁺⁵³ ₋₂₈	103 ⁺³⁹ ₋₅₄	77 ⁺⁴⁶ ₋₃₉
4327	7.70 ± 1.05	320.49 ^{+0.08} _{-0.08}	328.06 ^{+0.09} _{-0.09}	272 ⁺²⁶³ ₋₁₀₀	336 ⁺⁵²⁰ ₋₁₀₄	294 ⁺²²⁴ ₋₉₅	351 ⁺²⁹⁴ ₋₁₄₅

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
4350	2.17 ± 0.19	142.71 ^{+0.06} _{-0.06}	127.55 ^{+0.07} _{-0.07}	112 ⁺⁷² ₋₅₁	138 ⁺¹³¹ ₋₄₄	154 ⁺⁶⁹ ₋₆₈	138 ⁺⁸³ ₋₆₂
4368*	1.87 ± 0.01	—	—	100 ⁺⁶² ₋₄₇	125 ⁺¹¹¹ ₋₄₀	143 ⁺⁶¹ ₋₆₅	124 ⁺⁷³ ₋₅₆
4388	1.98 ± 1.26	134.60 ^{+0.07} _{-0.07}	119.13 ^{+0.07} _{-0.07}	105 ⁺⁶⁶ ₋₄₈	130 ⁺¹¹⁸ ₋₄₂	147 ⁺⁶⁴ ₋₆₆	129 ⁺⁷⁷ ₋₅₈
4556*	5.17 ± 0.13	—	—	208 ⁺¹⁷⁴ ₋₈₂	254 ⁺³⁴⁴ ₋₇₉	241 ⁺¹⁵³ ₋₈₅	263 ⁺¹⁹⁶ ₋₁₀₉
4569	5.05 ± 0.69	244.78 ^{+0.04} _{-0.04}	239.50 ^{+0.04} _{-0.04}	204 ⁺¹⁷⁰ ₋₈₁	249 ⁺³³⁵ ₋₇₇	238 ⁺¹⁵⁰ ₋₈₅	258 ⁺¹⁹² ₋₁₀₇
4653	0.95 ± 0.61	84.25 ^{+0.11} _{-0.11}	68.94 ^{+0.11} _{-0.11}	61 ⁺³⁶ ₋₃₀	81 ⁺⁵² ₋₂₇	102 ⁺³⁹ ₋₃₉	77 ⁺⁴⁵ ₋₃₉
4660	29.40 ± 2.23	754.23 ^{+1.20} _{-1.20}	891.17 ^{+1.68} _{-1.67}	624 ⁺⁹¹¹ ₋₁₉₃	819 ⁺¹⁶⁷⁵ ₋₂₇₃	563 ⁺⁷⁰¹ ₋₁₅₇	847 ⁺⁹⁸⁶ ₋₃₈₆
4701*	4.05 ± 0.16	—	—	175 ⁺¹³⁵ ₋₇₂	213 ⁺²⁶⁴ ₋₆₇	212 ⁺¹²¹ ₋₈₀	219 ⁺¹⁵³ ₋₉₂
4710	4.91 ± 0.69	240.43 ^{+0.03} _{-0.03}	234.53 ^{+0.04} _{-0.04}	200 ⁺¹⁶⁵ ₋₇₆	245 ⁺³²⁵ ₋₇₆	234 ⁺¹⁴⁶ ₋₈₄	253 ⁺¹⁸⁶ ₋₁₀₅
4744	7.74 ± 4.03	321.55 ^{+0.08} _{-0.08}	329.33 ^{+0.09} _{-0.09}	273 ⁺²⁶⁵ ₋₁₀₁	337 ⁺⁵²³ ₋₁₀₄	295 ⁺²²⁶ ₋₉₅	352 ⁺²⁹⁶ ₋₁₄₅
4745	6.44 ± 2.14	285.92 ^{+0.05} _{-0.05}	287.12 ^{+0.06} _{-0.06}	242 ⁺²¹⁹ ₋₉₂	296 ⁺⁴³³ ₋₉₂	269 ⁺¹⁸⁹ ₋₉₀	308 ⁺²⁴⁶ ₋₁₂₇
4776	21.90 ± 2.64	624.88 ^{+0.73} _{-0.72}	715.42 ^{+0.97} _{-0.97}	526 ⁺⁷¹⁴ ₋₁₆₆	681 ⁺¹³⁴¹ ₋₂₂₁	491 ⁺⁵⁶¹ ₋₁₃₇	709 ⁺⁷⁷⁷ ₋₃₁₃
4807	79.20 ± 54.50	1420.45 ^{+5.12} _{-5.10}	1866.30 ^{+8.05} _{-8.02}	1055 ⁺¹⁷⁷³ ₋₃₃₈	1427 ⁺³⁰³³ ₋₅₂₈	867 ⁺¹²⁸⁴ ₋₂₇₄	1438 ⁺¹⁹⁸³ ₋₇₁₂
4814	4.11 ± 0.53	214.61 ^{+0.03} _{-0.03}	205.39 ^{+0.04} _{-0.04}	177 ⁺¹³⁷ ₋₇₃	216 ⁺²⁶⁸ ₋₆₇	214 ⁺¹²³ ₋₈₀	222 ⁺¹⁵⁵ ₋₉₃
4871	8.48 ± 4.72	340.86 ^{+0.10} _{-0.10}	352.54 ^{+0.11} _{-0.11}	290 ⁺²⁹⁰ ₋₁₀₅	359 ⁺⁵⁷³ ₋₁₁₂	309 ⁺²⁴⁶ ₋₉₈	376 ⁺³²⁴ ₋₁₅₆
4939	3.20 ± 0.77	182.90 ^{+0.04} _{-0.04}	170.42 ^{+0.04} _{-0.04}	148 ⁺¹⁰⁶ ₋₅₇	181 ⁺²⁰³ ₋₅₇	188 ⁺⁹⁷ ₋₇₅	184 ⁺¹²¹ ₋₇₉
4955	8.34 ± 2.22	337.26 ^{+0.09} _{-0.09}	348.19 ^{+0.11} _{-0.11}	287 ⁺²⁸⁵ ₋₁₀₄	355 ⁺⁵⁶³ ₋₁₁₀	307 ⁺²⁴² ₋₉₇	371 ⁺³¹⁹ ₋₁₅₄
4959	7.48 ± 1.72	314.61 ^{+0.07} _{-0.07}	321.04 ^{+0.08} _{-0.08}	267 ⁺²⁵⁵ ₋₉₉	329 ⁺⁵⁰⁵ ₋₁₀₂	290 ⁺²¹⁸ ₋₉₄	344 ⁺²⁸⁶ ₋₁₄₂
5079	12.40 ± 6.09	434.51 ^{+0.24} _{-0.24}	468.06 ^{+0.29} _{-0.29}	371 ⁺⁴²⁴ ₋₁₂₆	467 ⁺⁸²⁴ ₋₁₄₇	373 ⁺³⁴⁸ ₋₁₁₀	489 ⁺⁴⁶⁸ ₋₂₀₆
5080	0.45 ± 0.22	52.39 ^{+0.14} _{-0.14}	39.58 ^{+0.13} _{-0.13}	35 ⁺²³ ₋₁₉	53 ⁺²⁴ ₋₁₉	72 ⁺³¹ ₋₂₇	48 ⁺³⁵ ₋₂₇
5123	3.11 [†]	179.60 ^{+0.04} _{-0.04}	166.83 ^{+0.04} _{-0.04}	145 ⁺¹⁰³ ₋₆₃	177 ⁺¹⁹⁷ ₋₅₆	185 ⁺⁹⁵ ₋₇₇	180 ⁺¹¹⁷ ₋₇₇
5206	70.90 ± 10.90	1323.47 ^{+4.42} _{-4.40}	1718.38 ^{+6.86} _{-6.83}	999 ⁺¹⁶⁶⁷ ₋₃₁₆	1349 ⁺²⁸⁷⁰ ₋₄₉₃	829 ⁺¹²¹⁴ ₋₂₅₇	1363 ⁺¹⁸⁴⁶ ₋₆₇₀
5212	26.10 ± 7.63	698.99 ^{+0.98} _{-0.98}	815.44 ^{+1.35} _{-1.35}	583 ⁺⁸²⁷ ₋₁₈₁	761 ⁺¹⁵³⁵ ₋₂₅₁	533 ⁺⁸⁹⁷ ₋₁₄₈	789 ⁺⁹⁷⁷ ₋₃₅₅
5255	0.49 ± 0.25	54.87 ^{+0.13} _{-0.13}	41.78 ^{+0.13} _{-0.13}	37 ⁺²⁴ ₋₁₉	55 ⁺²⁶ ₋₂₀	74 ⁺³¹ ₋₄₄	50 ⁺³⁵ ₋₂₈
5277	28.60 ± 2.08	741.05 ^{+1.15} _{-1.15}	873.02 ^{+1.60} _{-1.59}	614 ⁺⁸⁹¹ ₋₁₉₀	805 ⁺¹⁶⁴² ₋₂₆₈	556 ⁺⁶⁸⁷ ₋₁₅₅	834 ⁺⁹⁶⁵ ₋₃₇₈
5304*	6.46 ± 0.10	—	—	242 ⁺²¹⁹ ₋₉₂	297 ⁺⁴³⁴ ₋₉₂	269 ⁺¹⁹⁰ ₋₉₁	309 ⁺²⁴⁶ ₋₁₂₈
5305	3.87 ± 1.58	206.51 ^{+0.03} _{-0.03}	196.38 ^{+0.04} _{-0.04}	170 ⁺¹²⁹ ₋₇₁	207 ⁺²⁵¹ ₋₆₅	207 ⁺¹¹⁶ ₋₇₉	212 ⁺¹⁴⁶ ₋₈₉
5339	44.20 ± 1.75	978.63 ^{+2.27} _{-2.26}	1207.93 ^{+3.33} _{-3.32}	781 ⁺¹²³⁵ ₋₂₄₀	1042 ⁺²¹⁹⁹ ₋₃₆₂	677 ⁺⁹²⁴ ₋₁₉₅	1067 ⁺¹³³⁹ ₋₅₀₅
5379	14.30 ± 1.70	475.94 ^{+0.32} _{-0.32}	520.58 ^{+0.40} _{-0.40}	406 ⁺⁴⁸⁵ ₋₁₃₅	515 ⁺⁹³⁷ ₋₁₁₅	400 ⁺³⁹⁴ ₋₁₁₅	539 ⁺⁵³⁴ ₋₂₂₉
5387	1.96 ± 0.24	133.73 ^{+0.07} _{-0.07}	118.23 ^{+0.07} _{-0.07}	104 ⁺⁶⁵ ₋₄₈	129 ⁺¹¹⁷ ₋₄₂	147 ⁺⁶³ ₋₅₈	128 ⁺⁷⁶ ₋₅₈
5389	2.51 ± 0.22	156.61 ^{+0.05} _{-0.05}	142.18 ^{+0.06} _{-0.06}	124 ⁺⁸³ ₋₅₆	153 ⁺¹⁵⁵ ₋₄₉	166 ⁺⁷⁸ ₋₇₁	154 ⁺⁹⁵ ₋₆₇
5407	3.86 ± 0.65	206.17 ^{+0.03} _{-0.03}	196.00 ^{+0.04} _{-0.04}	169 ⁺¹²⁸ ₋₇₁	206 ⁺²⁵⁰ ₋₆₄	207 ⁺¹¹⁶ ₋₇₉	212 ⁺¹⁴⁶ ₋₈₉
5409	3.23 ± 0.39	183.99 ^{+0.04} _{-0.04}	171.61 ^{+0.04} _{-0.04}	149 ⁺¹⁰⁷ ₋₆₄	182 ⁺²⁰⁵ ₋₅₇	189 ⁺⁹⁸ ₋₇₆	185 ⁺¹²² ₋₇₉
5410	1.18 ± 0.96	96.70 ^{+0.10} _{-0.10}	80.97 ^{+0.10} _{-0.10}	71 ⁺⁴² ₋₃₅	92 ⁺⁶⁶ ₋₃₁	114 ⁺⁴⁴ ₋₅₇	89 ⁺⁵¹ ₋₄₃
5411	0.71 ± 0.32	69.90 ^{+0.12} _{-0.12}	55.43 ^{+0.12} _{-0.12}	49 ⁺²⁹ ₋₂₅	68 ⁺³⁸ ₋₂₄	89 ⁺³⁴ ₋₄₉	63 ⁺³⁹ ₋₃₃
5412	2.26 ± 0.47	146.46 ^{+0.06} _{-0.06}	131.48 ^{+0.06} _{-0.06}	115 ⁺⁷⁵ ₋₅₂	142 ⁺¹³⁷ ₋₄₅	158 ⁺⁷¹ ₋₆₉	142 ⁺⁸⁶ ₋₆₃
5413	1.66 ± 0.15	120.26 ^{+0.08} _{-0.08}	104.45 ^{+0.08} _{-0.08}	92 ⁺⁵⁶ ₋₄₃	115 ⁺⁹⁷ ₋₃₈	135 ⁺⁵⁵ ₋₆₃	113 ⁺⁶⁶ ₋₅₂
5415	1.74 ± 0.29	123.93 ^{+0.07} _{-0.07}	108.18 ^{+0.08} _{-0.08}	95 ⁺⁵⁸ ₋₄₅	119 ⁺¹⁰² ₋₃₉	138 ⁺⁵⁷ ₋₆₄	117 ⁺⁶⁹ ₋₅₄
5416	2.28 ± 0.43	147.29 ^{+0.06} _{-0.06}	132.34 ^{+0.06} _{-0.06}	116 ⁺⁷⁵ ₋₅₂	143 ⁺¹³⁹ ₋₄₆	158 ⁺⁷² ₋₆₉	143 ⁺⁸⁷ ₋₆₃
5417	4.71 ± 0.19	234.12 ^{+0.03} _{-0.03}	227.37 ^{+0.04} _{-0.04}	195 ⁺¹⁵⁸ ₋₇₈	237 ⁺³¹¹ ₋₇₄	229 ⁺¹⁴⁰ ₋₈₃	245 ⁺¹⁷⁸ ₋₁₀₂
5419	0.95 ± 0.21	84.37 ^{+0.11} _{-0.11}	69.04 ^{+0.11} _{-0.11}	61 ⁺³⁶ ₋₃₁	81 ⁺⁵² ₋₂₇	102 ⁺³⁹ ₋₃₉	77 ⁺⁴⁵ ₋₃₉
5420	6.75 ± 1.50	294.63 ^{+0.06} _{-0.06}	297.37 ^{+0.06} _{-0.06}	249 ⁺²³⁰ ₋₉₄	306 ⁺⁴⁵⁵ ₋₉₅	275 ⁺¹⁹⁸ ₋₉₂	319 ⁺²⁵⁸ ₋₁₃₂
5421	2.36 ± 0.28	150.57 ^{+0.05} _{-0.05}	135.79 ^{+0.06} _{-0.06}	119 ⁺⁷⁸ ₋₅₄	146 ⁺¹⁴⁴ ₋₄₇	161 ⁺⁷⁴ ₋₇₀	147 ⁺⁹⁰ ₋₆₅
5423	1.22 ± 0.98	98.78 ^{+0.10} _{-0.10}	83.01 ^{+0.10} _{-0.10}	73 ⁺⁴³ ₋₃₆	94 ⁺⁶⁸ ₋₃₂	116 ⁺⁴⁵ ₋₅₈	91 ⁺⁵³ ₋₄₄
5425	20.10 ± 6.90	591.57 ^{+0.62} _{-0.62}	671.08 ^{+0.82} _{-0.82}	500 ⁺⁶⁶² ₋₁₅₉	644 ⁺¹²⁵² ₋₂₀₈	472 ⁺⁵²⁴ ₋₁₃₂	672 ⁺⁷²² ₋₂₉₅
5427	2.23 ± 0.36	145.22 ^{+0.06} _{-0.06}	130.17 ^{+0.06} _{-0.06}	114 ⁺⁷⁴ ₋₅₂	141 ⁺¹³⁵ ₋₄₅	157 ⁺⁷⁰ ₋₆₉	141 ⁺⁸⁵ ₋₆₃
5428	0.58 ± 0.55	61.43 ^{+0.13} _{-0.13}	47.67 ^{+0.12} _{-0.12}	42 ⁺²⁶ ₋₂₂	60 ⁺³¹ ₋₂₁	81 ⁺³² ₋₄₆	56 ⁺³⁷ ₋₃₀
5429	5.16 ± 0.80	248.18 ^{+0.04} _{-0.04}	243.38 ^{+0.04} _{-0.04}	207 ⁺¹⁷⁴ ₋₈₂	253 ⁺³⁴³ ₋₇₉	240 ⁺¹⁵³ ₋₈₅	262 ⁺¹⁹⁶ ₋₁₀₉
5433	4.88 ± 1.09	239.49 ^{+0.03} _{-0.03}	233.46 ^{+0.04} _{-0.04}	200 ⁺¹⁶⁴ ₋₈₀	243 ⁺³²³ ₋₇₆	234 ⁺¹⁴⁵ ₋₈₄	252 ⁺¹⁸⁵ ₋₁₀₅

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
5434	5.07 ± 1.24	$245.40^{+0.04}_{-0.04}$	$240.21^{+0.04}_{-0.04}$	205^{+170}_{-81}	250^{+336}_{-78}	238^{+151}_{-85}	259^{+192}_{-107}
5436	0.39 ± 0.09	$47.75^{+0.14}_{-0.14}$	$35.52^{+0.13}_{-0.13}$	32^{+21}_{-17}	49^{+21}_{-18}	67^{+30}_{-41}	44^{+34}_{-25}
5439	14.50 ± 1.35	$480.18^{+0.33}_{-0.33}$	$526.00^{+0.42}_{-0.42}$	410^{+492}_{-136}	519^{+949}_{-164}	403^{+399}_{-116}	544^{+341}_{-232}
5443	1.02^{\dagger}	$88.11^{+0.11}_{-0.11}$	$72.63^{+0.11}_{-0.11}$	64^{+37}_{-32}	84^{+56}_{-29}	106^{+40}_{-55}	81^{+47}_{-40}
5446	1.28 ± 0.64	$101.86^{+0.09}_{-0.09}$	$86.04^{+0.10}_{-0.10}$	76^{+45}_{-37}	97^{+72}_{-32}	118^{+46}_{-59}	94^{+54}_{-45}
5447	0.40 ± 0.13	$48.06^{+0.14}_{-0.14}$	$35.80^{+0.13}_{-0.13}$	32^{+21}_{-17}	49^{+22}_{-18}	68^{+30}_{-41}	45^{+34}_{-25}
5448	77.10 ± 24.00	$1396.28^{+4.94}_{-4.93}$	$1829.26^{+7.75}_{-7.71}$	1041^{+1747}_{-332}	1408^{+2994}_{-520}	858^{+1267}_{-270}	1420^{+1949}_{-702}
5450	8.02 ± 0.81	$328.93^{+0.09}_{-0.09}$	$338.18^{+0.10}_{-0.10}$	280^{+274}_{-102}	346^{+542}_{-107}	301^{+233}_{-96}	361^{+307}_{-149}
5451	2.54 ± 0.19	$157.81^{+0.05}_{-0.05}$	$143.45^{+0.06}_{-0.06}$	125^{+84}_{-56}	154^{+157}_{-71}	167^{+79}_{-68}	155^{+96}_{-68}
5452	5.50 ± 2.00	$258.50^{+0.04}_{-0.04}$	$255.25^{+0.04}_{-0.04}$	217^{+85}_{-85}	265^{+82}_{-82}	248^{+87}_{-87}	275^{+114}_{-114}
5453	7.64 ± 3.57	$318.89^{+0.08}_{-0.08}$	$326.15^{+0.09}_{-0.09}$	271^{+261}_{-100}	334^{+516}_{-104}	293^{+223}_{-95}	349^{+292}_{-144}
5454	1.53 ± 0.66	$114.16^{+0.08}_{-0.08}$	$98.28^{+0.09}_{-0.09}$	86^{+52}_{-41}	109^{+88}_{-36}	129^{+52}_{-62}	107^{+62}_{-50}
5456	3.60 ± 0.76	$197.19^{+0.04}_{-0.04}$	$186.07^{+0.04}_{-0.04}$	161^{+119}_{-68}	196^{+232}_{-61}	200^{+108}_{-78}	201^{+136}_{-85}
5457	7.94 ± 0.92	$326.83^{+0.08}_{-0.08}$	$335.66^{+0.10}_{-0.10}$	278^{+272}_{-102}	343^{+536}_{-106}	299^{+231}_{-96}	359^{+303}_{-148}
5458	0.69^{\dagger}	$68.89^{+0.12}_{-0.12}$	$54.50^{+0.12}_{-0.12}$	48^{+29}_{-25}	67^{+37}_{-23}	88^{+34}_{-49}	62^{+39}_{-33}
5459	1.81^{\dagger}	$127.09^{+0.07}_{-0.07}$	$111.41^{+0.08}_{-0.08}$	98^{+61}_{-46}	122^{+107}_{-40}	141^{+59}_{-65}	121^{+71}_{-55}
5461	8.84 ± 3.94	$350.04^{+0.11}_{-0.11}$	$363.65^{+0.13}_{-0.13}$	298^{+303}_{-107}	370^{+597}_{-115}	316^{+256}_{-99}	387^{+338}_{-160}
5462	3.11^{\dagger}	$179.60^{+0.04}_{-0.04}$	$166.83^{+0.04}_{-0.04}$	145^{+103}_{-63}	177^{+197}_{-56}	185^{+95}_{-77}	180^{+117}_{-77}
5463	6.02 ± 0.70	$273.86^{+0.05}_{-0.05}$	$273.04^{+0.05}_{-0.05}$	231^{+204}_{-89}	282^{+404}_{-87}	260^{+178}_{-89}	294^{+229}_{-121}
5464	7.86 ± 0.75	$324.73^{+0.08}_{-0.08}$	$333.13^{+0.09}_{-0.09}$	276^{+269}_{-101}	341^{+531}_{-106}	297^{+229}_{-96}	356^{+300}_{-147}
5465	0.75^{\dagger}	$72.27^{+0.12}_{-0.12}$	$57.63^{+0.12}_{-0.12}$	51^{+30}_{-26}	70^{+40}_{-24}	91^{+35}_{-50}	66^{+40}_{-34}
5466	0.84 ± 0.71	$78.07^{+0.11}_{-0.11}$	$63.06^{+0.11}_{-0.11}$	56^{+33}_{-28}	75^{+46}_{-26}	96^{+37}_{-52}	71^{+42}_{-36}
5467	20.40 ± 3.38	$597.19^{+0.64}_{-0.64}$	$678.54^{+0.85}_{-0.85}$	504^{+671}_{-160}	650^{+1267}_{-210}	475^{+530}_{-298}	678^{+732}_{-298}
5469	8.49 ± 1.82	$341.12^{+0.10}_{-0.10}$	$352.85^{+0.11}_{-0.11}$	291^{+291}_{-105}	360^{+573}_{-112}	309^{+324}_{-98}	376^{+324}_{-156}
5470*	28.40 ± 1.51	—	—	611^{+886}_{-189}	801^{+1633}_{-267}	555^{+683}_{-154}	830^{+960}_{-377}
5471	111.00 ± 9.07	$1762.27^{+7.92}_{-7.88}$	$2400.64^{+12.93}_{-12.86}$	1244^{+2095}_{-415}	1685^{+3540}_{-646}	993^{+1499}_{-335}	1684^{+2448}_{-846}
5472	1.70 ± 0.45	$122.10^{+0.08}_{-0.08}$	$106.32^{+0.08}_{-0.08}$	93^{+57}_{-44}	117^{+99}_{-38}	136^{+56}_{-64}	115^{+67}_{-53}
5473*	6.99 ± 0.44	—	—	255^{+238}_{-96}	314^{+471}_{-97}	280^{+205}_{-92}	327^{+267}_{-135}
5474	0.79 ± 0.24	$74.78^{+0.12}_{-0.12}$	$59.97^{+0.12}_{-0.12}$	53^{+31}_{-27}	72^{+42}_{-25}	93^{+36}_{-51}	68^{+41}_{-35}
5475	5.77 ± 1.04	$266.54^{+0.04}_{-0.04}$	$264.53^{+0.05}_{-0.05}$	224^{+195}_{-87}	274^{+386}_{-85}	254^{+170}_{-78}	285^{+220}_{-118}
5476	1.68 ± 0.32	$121.18^{+0.08}_{-0.08}$	$105.39^{+0.08}_{-0.08}$	93^{+57}_{-44}	116^{+98}_{-38}	136^{+56}_{-63}	114^{+67}_{-53}
5477	61.00 ± 0.92	$1202.24^{+3.60}_{-3.59}$	$1536.03^{+5.48}_{-5.46}$	925^{+1525}_{-289}	1246^{+2651}_{-448}	778^{+1120}_{-235}	1264^{+1672}_{-615}
5478	2.33 ± 0.43	$149.34^{+0.06}_{-0.06}$	$134.50^{+0.06}_{-0.06}$	118^{+77}_{-53}	145^{+142}_{-46}	160^{+73}_{-69}	145^{+89}_{-64}
5479	2.89 ± 0.31	$171.37^{+0.04}_{-0.04}$	$157.94^{+0.05}_{-0.05}$	138^{+95}_{-60}	168^{+181}_{-53}	179^{+88}_{-73}	171^{+109}_{-74}
5480	0.51 ± 0.17	$56.80^{+0.13}_{-0.13}$	$43.50^{+0.13}_{-0.13}$	39^{+24}_{-20}	56^{+27}_{-20}	76^{+31}_{-45}	52^{+36}_{-28}
5482	2.94 ± 0.69	$173.26^{+0.04}_{-0.04}$	$159.98^{+0.05}_{-0.05}$	139^{+97}_{-61}	170^{+185}_{-54}	180^{+90}_{-74}	173^{+111}_{-74}
5483	0.62^{\dagger}	$64.24^{+0.13}_{-0.13}$	$50.22^{+0.12}_{-0.12}$	44^{+27}_{-23}	63^{+33}_{-22}	83^{+38}_{-47}	58^{+38}_{-31}
5484	4.78 ± 0.52	$236.34^{+0.03}_{-0.03}$	$229.88^{+0.04}_{-0.04}$	197^{+160}_{-79}	240^{+316}_{-75}	231^{+142}_{-84}	248^{+181}_{-103}
5485	6.84 ± 3.99	$297.14^{+0.06}_{-0.06}$	$300.32^{+0.07}_{-0.07}$	252^{+233}_{-95}	309^{+461}_{-96}	277^{+201}_{-92}	322^{+261}_{-133}
5486*	5.35 ± 0.09	—	—	213^{+180}_{-84}	260^{+356}_{-81}	245^{+159}_{-86}	269^{+203}_{-111}
5487	0.43^{\dagger}	$50.67^{+0.14}_{-0.14}$	$38.07^{+0.13}_{-0.13}$	34^{+22}_{-18}	51^{+23}_{-19}	70^{+30}_{-42}	47^{+34}_{-26}
5488	8.99 ± 5.54	$353.82^{+0.11}_{-0.11}$	$368.24^{+0.13}_{-0.13}$	302^{+308}_{-108}	374^{+607}_{-116}	318^{+260}_{-99}	392^{+343}_{-162}
5489*	4.64 ± 0.16	—	—	193^{+155}_{-78}	235^{+306}_{-73}	228^{+138}_{-83}	242^{+176}_{-101}
5490	1.02 ± 0.36	$88.11^{+0.11}_{-0.11}$	$72.63^{+0.11}_{-0.11}$	64^{+37}_{-32}	84^{+56}_{-29}	106^{+40}_{-55}	81^{+47}_{-40}
5491	2.20 ± 1.74	$143.97^{+0.06}_{-0.06}$	$128.86^{+0.06}_{-0.06}$	113^{+73}_{-51}	139^{+133}_{-45}	153^{+69}_{-68}	139^{+84}_{-62}
5492	11.70 ± 2.29	$418.68^{+0.21}_{-0.21}$	$448.21^{+0.25}_{-0.25}$	358^{+400}_{-123}	449^{+781}_{-141}	363^{+330}_{-108}	470^{+443}_{-197}
5493	2.79 ± 0.70	$167.56^{+0.05}_{-0.05}$	$153.85^{+0.05}_{-0.05}$	134^{+92}_{-59}	164^{+174}_{-52}	175^{+86}_{-72}	166^{+105}_{-72}
5494	9.00 ± 4.61	$354.07^{+0.11}_{-0.11}$	$368.55^{+0.13}_{-0.13}$	302^{+308}_{-108}	375^{+607}_{-116}	318^{+260}_{-99}	392^{+344}_{-163}
5495	2.54 ± 0.63	$157.81^{+0.05}_{-0.05}$	$143.45^{+0.06}_{-0.06}$	125^{+84}_{-56}	154^{+157}_{-49}	167^{+79}_{-71}	155^{+96}_{-68}

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
5497	0.63 ± 0.42	64.76 ^{+0.13} _{-0.13}	50.70 ^{+0.12} _{-0.12}	45 ⁺²⁷ ₋₂₃	63 ⁺³⁴ ₋₂₂	84 ⁺³³ ₋₄₇	59 ⁺³⁸ ₋₃₁
5498	15.30 ± 12.20	496.94 ^{+0.37} _{-0.37}	547.50 ^{+0.47} _{-0.47}	424 ⁺⁵¹⁷ ₋₁₃₉	538 ⁺⁹⁹⁵ ₋₁₇₁	414 ⁺⁴¹⁸ ₋₁₁₈	563 ⁺⁵⁶⁸ ₋₂₄₁
5499	23.00 ± 5.19	644.75 ^{+0.79} _{-0.79}	742.05 ^{+1.07} _{-1.07}	541 ⁺¹⁷⁰ ₋₁₇₀	702 ⁺¹³⁹³ ₋₂₂₉	503 ⁺⁵⁸³ ₋₁₄₀	731 ⁺⁸⁰⁹ ₋₃₂₅
5500	10.80 ± 2.08	397.81 ^{+0.17} _{-0.17}	422.23 ^{+0.21} _{-0.21}	340 ⁺³⁷⁰ ₋₁₁₈	425 ⁺⁷²⁴ ₋₁₃₃	349 ⁺³⁰⁷ ₋₁₀₅	445 ⁺⁴¹¹ ₋₁₈₆
5501	2.03 [†]	136.76 ^{+0.06} _{-0.06}	121.36 ^{+0.07} _{-0.07}	106 ⁺⁶⁷ ₋₄₉	132 ⁺¹²² ₋₄₃	149 ⁺⁶⁵ ₋₆₇	131 ⁺⁷⁸ ₋₅₉
5502	633.00 ± 216.00	5358.68 ^{+57.18} _{-56.57}	8796.06 ^{+113.41} _{-111.96}	2748 ⁺³¹⁶³ ₋₁₀₄₇	3514 ⁺⁷⁶¹² ₋₁₄₇₉	1818 ⁺²⁵⁰⁸ ₋₆₉₈	3416 ⁺⁶⁹²⁶ ₋₁₅₅₅
5503	0.35 [†]	44.65 ^{+0.14} _{-0.14}	32.85 ^{+0.13} _{-0.13}	30 ⁺²⁰ ₋₁₆	46 ⁺¹⁹ ₋₁₇	64 ⁺³⁰ ₋₂₄	42 ⁺³⁴ ₋₂₄
5504	0.95 ± 0.54	84.42 ^{+0.11} _{-0.11}	69.10 ^{+0.11} _{-0.11}	61 ⁺³⁶ ₋₃₁	81 ⁺⁵² ₋₂₈	102 ⁺³⁹ ₋₃₉	77 ⁺⁴⁵ ₋₃₉
5505	6.10 ± 1.93	276.18 ^{+0.05} _{-0.05}	275.74 ^{+0.05} _{-0.05}	233 ⁺²⁰⁷ ₋₉₀	285 ⁺⁴⁰⁹ ₋₈₈	262 ⁺¹⁸⁰ ₋₈₉	296 ⁺²³² ₋₁₂₂
5507	0.85 [†]	78.48 ^{+0.11} _{-0.11}	63.45 ^{+0.11} _{-0.11}	56 ⁺³³ ₋₂₈	75 ⁺⁴⁶ ₋₂₆	97 ⁺³⁷ ₋₃₆	71 ⁺⁴³ ₋₃₇
5508	0.61 ± 0.59	63.51 ^{+0.13} _{-0.13}	49.56 ^{+0.12} _{-0.12}	44 ⁺²⁷ ₋₂₃	62 ⁺³³ ₋₂₂	83 ⁺³³ ₋₄₇	58 ⁺³⁷ ₋₃₁
5509	5.12 ± 1.01	246.95 ^{+0.04} _{-0.04}	241.97 ^{+0.04} _{-0.04}	206 ⁺¹⁷² ₋₈₂	252 ⁺³⁴⁰ ₋₇₈	239 ⁺¹⁵² ₋₈₅	261 ⁺¹⁹⁴ ₋₁₀₈
5510	1.03 ± 0.68	88.66 ^{+0.10} _{-0.10}	73.16 ^{+0.11} _{-0.11}	64 ⁺³⁸ ₋₃₂	85 ⁺⁵⁷ ₋₂₉	106 ⁺⁴⁰ ₋₅₅	81 ⁺⁴⁷ ₋₄₀
5512*	8.50 ± 0.35	—	—	291 ⁺²⁹¹ ₋₁₀₅	360 ⁺⁵⁷⁴ ₋₁₁₂	309 ⁺²⁴⁶ ₋₉₈	376 ⁺³²⁵ ₋₁₅₆
5513	4.55 ± 4.27	229.01 ^{+0.03} _{-0.03}	221.58 ^{+0.04} _{-0.04}	190 ⁺¹⁵² ₋₇₇	232 ⁺²⁹⁹ ₋₇₂	225 ⁺¹³⁶ ₋₈₃	239 ⁺¹⁷² ₋₁₀₀
5514	1.96 [†]	133.73 ^{+0.07} _{-0.07}	118.23 ^{+0.07} _{-0.07}	104 ⁺⁶⁵ ₋₄₈	129 ⁺¹¹⁷ ₋₄₂	147 ⁺⁶³ ₋₆₆	128 ⁺⁷⁶ ₋₅₈
5515	3.58 ± 0.92	196.49 ^{+0.04} _{-0.04}	185.29 ^{+0.04} _{-0.04}	160 ⁺¹¹⁹ ₋₆₈	196 ⁺²³⁰ ₋₆₁	199 ⁺¹⁰⁸ ₋₇₈	200 ⁺¹³⁵ ₋₈₅
5516	1.89 ± 0.69	130.65 ^{+0.07} _{-0.07}	115.06 ^{+0.07} _{-0.07}	101 ⁺⁶³ ₋₄₇	126 ⁺¹¹² ₋₄₁	144 ⁺⁶¹ ₋₆₆	125 ⁺⁷⁴ ₋₅₇
5517	2.23 ± 0.67	145.22 ^{+0.06} _{-0.06}	130.17 ^{+0.06} _{-0.06}	114 ⁺⁷⁴ ₋₅₂	141 ⁺¹³⁵ ₋₄₅	157 ⁺⁷⁰ ₋₆₉	141 ⁺⁸⁵ ₋₆₃
5518	3.68 ± 0.32	199.98 ^{+0.04} _{-0.04}	189.14 ^{+0.04} _{-0.04}	164 ⁺¹²² ₋₆₉	199 ⁺²³⁷ ₋₆₂	202 ⁺¹¹¹ ₋₇₈	204 ⁺¹³⁹ ₋₈₆
5523	2.16 ± 0.30	142.29 ^{+0.06} _{-0.06}	127.11 ^{+0.07} _{-0.07}	111 ⁺⁷² ₋₅₁	138 ⁺¹³⁰ ₋₄₄	154 ⁺⁶⁸ ₋₆₈	137 ⁺⁸³ ₋₆₁
5524	1.29 [†]	102.37 ^{+0.09} _{-0.09}	86.54 ^{+0.10} _{-0.10}	76 ⁺⁴⁵ ₋₃₇	98 ⁺⁷³ ₋₃₃	119 ⁺⁴⁶ ₋₅₉	95 ⁺⁵⁵ ₋₄₅
5526*	4.43 ± 0.28	—	—	187 ⁺¹⁴⁸ ₋₇₆	227 ⁺²⁹¹ ₋₈₂	222 ⁺¹³² ₋₉₈	234 ⁺¹⁶⁸ ₋₉₈
5527	56.70 ± 3.08	1147.39 ^{+3.25} _{-3.24}	1454.52 ^{+4.91} _{-4.89}	891 ⁺¹⁴⁵⁷ ₋₂₇₇	1197 ⁺¹⁵⁴⁷ ₋₄₂₇	754 ⁺¹⁰⁷⁴ ₋₂₂₅	1217 ⁺¹⁵⁹² ₋₅₈₉
5528	29.60 ± 4.68	757.50 ^{+1.21} _{-1.21}	895.69 ^{+1.70} _{-1.69}	626 ⁺⁹¹⁶ ₋₁₉₃	822 ⁺¹⁶⁸³ ₋₂₇₅	565 ⁺⁷⁰⁴ ₋₁₅₇	851 ⁺⁹⁹² ₋₃₈₇
5529	9.01 ± 1.82	354.32 ^{+0.11} _{-0.11}	368.85 ^{+0.13} _{-0.13}	302 ⁺³⁰⁹ ₋₁₀₈	375 ⁺⁶⁰⁸ ₋₁₁₆	319 ⁺²⁶⁰ ₋₉₉	392 ⁺³⁴⁴ ₋₁₆₃
5530	0.69 ± 0.07	68.70 ^{+0.12} _{-0.12}	54.32 ^{+0.12} _{-0.12}	48 ⁺²⁹ ₋₂₅	67 ⁺³⁷ ₋₂₃	88 ⁺³⁴ ₋₄₉	62 ⁺³⁹ ₋₃₃
5531	1.30 ± 0.24	102.87 ^{+0.09} _{-0.09}	87.04 ^{+0.10} _{-0.10}	77 ⁺⁴⁵ ₋₃₇	98 ⁺⁷³ ₋₃₃	119 ⁺⁴⁷ ₋₅₉	95 ⁺⁵⁵ ₋₄₆
5532	10.80 ± 2.58	397.81 ^{+0.17} _{-0.17}	422.23 ^{+0.21} _{-0.21}	340 ⁺³⁷⁰ ₋₁₁₈	425 ⁺⁷²⁴ ₋₁₃₃	349 ⁺³⁰⁷ ₋₁₀₅	445 ⁺⁴¹¹ ₋₁₈₆
5533	57.00 ± 4.67	1151.26 ^{+3.27} _{-3.26}	1460.25 ^{+4.95} _{-4.93}	893 ⁺¹⁴⁶² ₋₂₇₈	1201 ⁺²⁵⁵⁴ ₋₄₂₉	756 ⁺¹⁰⁷⁷ ₋₂₂₆	1221 ⁺¹⁵⁹⁸ ₋₅₉₁
5534	1.24 ± 0.14	99.82 ^{+0.09} _{-0.09}	84.02 ^{+0.10} _{-0.10}	74 ⁺⁴⁴ ₋₃₆	95 ⁺⁷⁰ ₋₃₂	116 ⁺⁴⁵ ₋₄₅	92 ⁺⁵³ ₋₄₅
5536	1.90 [†]	131.10 ^{+0.07} _{-0.07}	115.52 ^{+0.07} _{-0.07}	101 ⁺⁶³ ₋₄₇	126 ⁺¹¹³ ₋₄₁	144 ⁺⁶¹ ₋₆₆	125 ⁺⁷⁴ ₋₅₇
5537	20.30 ± 10.90	595.32 ^{+0.63} _{-0.63}	676.06 ^{+0.84} _{-0.84}	503 ⁺⁶⁶⁸ ₋₁₆₀	648 ⁺¹²⁶² ₋₂₁₀	474 ⁺⁵²⁸ ₋₁₃₂	676 ⁺⁷²⁹ ₋₂₉₇
5538	11.80 ± 1.97	420.96 ^{+0.21} _{-0.21}	451.06 ^{+0.26} _{-0.26}	360 ⁺⁴⁰⁴ ₋₁₂₃	452 ⁺⁷⁸⁷ ₋₁₄₂	364 ⁺³³³ ₋₁₀₈	473 ⁺⁴⁴⁷ ₋₁₉₉
5539	1.13 ± 0.86	94.06 ^{+0.10} _{-0.10}	78.40 ^{+0.10} _{-0.10}	69 ⁺⁴⁰ ₋₃₄	90 ⁺⁶³ ₋₃₀	111 ⁺⁴³ ₋₅₇	86 ⁺⁵⁰ ₋₄₂
5540	2.55 ± 0.96	158.20 ^{+0.05} _{-0.05}	143.87 ^{+0.06} _{-0.06}	126 ⁺⁸⁴ ₋₅₆	154 ⁺¹⁵⁷ ₋₄₉	168 ⁺⁷⁹ ₋₇₁	155 ⁺⁹⁷ ₋₆₈
5541	2.57 ± 0.63	159.00 ^{+0.05} _{-0.05}	144.71 ^{+0.06} _{-0.06}	126 ⁺⁸⁴ ₋₅₆	155 ⁺¹⁵⁹ ₋₄₉	168 ⁺⁸⁰ ₋₇₁	156 ⁺⁹⁷ ₋₆₈
5542	8.17 ± 0.92	332.85 ^{+0.09} _{-0.09}	342.88 ^{+0.10} _{-0.10}	283 ⁺²⁸⁰ ₋₁₀₃	350 ⁺⁵⁵² ₋₁₀₉	303 ⁺²³⁷ ₋₉₇	366 ⁺³¹² ₋₁₅₁
5543	25.10 ± 19.90	681.76 ^{+0.92} _{-0.92}	792.02 ^{+1.26} _{-1.26}	570 ⁺⁸⁰¹ ₋₁₇₈	742 ⁺¹⁴⁹⁰ ₋₂₄₄	524 ⁺⁶²³ ₋₁₄₅	771 ⁺⁸⁶⁹ ₋₃₄₅
5545	6.74 ± 1.46	294.35 ^{+0.06} _{-0.06}	297.04 ^{+0.06} _{-0.06}	249 ⁺²²⁹ ₋₉₄	306 ⁺⁴⁵⁴ ₋₉₅	275 ⁺¹⁹⁸ ₋₉₂	319 ⁺²⁵⁷ ₋₁₃₁
5546	44.10 ± 14.10	977.21 ^{+2.26} _{-2.25}	1205.89 ^{+3.31} _{-3.30}	780 ⁺¹²³⁴ ₋₂₄₀	1041 ⁺²¹⁹⁶ ₋₃₆₂	676 ⁺⁹²³ ₋₁₉₅	1066 ⁺¹³³⁶ ₋₅₀₅
5547	41.80 ± 6.96	944.34 ^{+2.09} _{-2.08}	1158.66 ^{+3.04} _{-3.03}	758 ⁺¹¹⁸⁸ ₋₂₃₃	1009 ⁺²¹²⁴ ₋₃₄₉	660 ⁺⁸⁹² ₋₁₈₉	1035 ⁺¹²⁸⁶ ₋₄₈₈
5548	1.79 ± 0.22	126.20 ^{+0.07} _{-0.07}	110.49 ^{+0.08} _{-0.08}	97 ⁺⁶⁰ ₋₄₅	121 ⁺¹⁰⁵ ₋₃₉	140 ⁺⁵⁹ ₋₅₅	120 ⁺⁷⁰ ₋₅₅
5551	1.07 ± 0.20	90.84 ^{+0.10} _{-0.10}	75.27 ^{+0.11} _{-0.11}	66 ⁺³⁹ ₋₃₃	87 ⁺⁵⁹ ₋₂₉	108 ⁺⁴¹ ₋₅₆	83 ⁺⁴⁸ ₋₄₁
5554	9.41 ± 0.90	364.29 ^{+0.13} _{-0.13}	381.00 ^{+0.15} _{-0.15}	311 ⁺³²³ ₋₁₁₁	386 ⁺⁶³⁴ ₋₁₂₀	326 ⁺²⁷¹ ₋₁₀₁	404 ⁺³⁵⁹ ₋₁₆₈
5555	1.31 ± 0.33	103.38 ^{+0.09} _{-0.09}	87.54 ^{+0.10} _{-0.10}	77 ⁺⁴⁶ ₋₃₇	99 ⁺⁷⁴ ₋₃₃	120 ⁺⁴⁷ ₋₅₉	96 ⁺⁵⁵ ₋₄₆
5556	1.35 ± 0.89	105.38 ^{+0.09} _{-0.09}	89.52 ^{+0.09} _{-0.09}	79 ⁺⁴⁷ ₋₃₈	101 ⁺⁷⁷ ₋₃₃	121 ⁺⁴⁸ ₋₆₀	98 ⁺⁵⁶ ₋₄₇
5557	1.33 [†]	104.38 ^{+0.09} _{-0.09}	88.53 ^{+0.09} _{-0.09}	78 ⁺⁴⁶ ₋₃₈	100 ⁺⁷⁵ ₋₃₃	121 ⁺⁴⁷ ₋₄₆	97 ⁺⁵⁶ ₋₄₆
5559	12.90 ± 3.80	445.62 ^{+0.26} _{-0.26}	482.07 ^{+0.32} _{-0.32}	381 ⁺⁴⁴⁰ ₋₁₂₉	480 ⁺⁸⁵⁴ ₋₁₅₁	381 ⁺³⁶⁰ ₋₁₁₁	503 ⁺⁴⁸⁶ ₋₂₁₂

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
5560	23.00 ± 13.90	644.75 ^{+0.79} _{-0.79}	742.05 ^{+1.07} _{-1.07}	541 ⁺⁷⁴⁴ ₋₁₇₀	702 ⁺¹³⁹³ ₋₂₂₉	503 ⁺⁵⁸³ ₋₁₄₀	731 ⁺⁸⁰⁹ ₋₃₂₅
5561	1.23 ± 0.15	99.30 ^{+0.09} _{-0.09}	83.52 ^{+0.10} _{-0.10}	74 ⁺⁴³ ₋₃₆	95 ⁺⁶⁹ ₋₃₂	116 ⁺⁴⁵ ₋₅₈	92 ⁺⁵³ ₋₄₄
5562	26.80 ± 6.43	710.91 ^{+1.03} _{-1.03}	831.70 ^{+1.42} _{-1.42}	591 ⁺³⁴⁶ ₋₁₈₄	773 ⁺¹⁵⁶⁵ ₋₂₅₆	540 ⁺⁶⁵⁴ ₋₁₅₀	802 ⁺⁹¹⁷ ₋₃₆₂
5563*	3.04 ± 0.13	—	—	143 ⁺¹⁰⁰ ₋₆₂	174 ⁺¹⁹² ₋₅₅	183 ⁺⁹³ ₋₇₄	177 ⁺¹¹⁵ ₋₇₆
5564	55.50 ± 10.60	1131.82 ^{+3.15} _{-3.14}	1431.49 ^{+4.75} _{-4.74}	881 ⁺¹⁴³⁸ ₋₂₇₃	1183 ⁺²⁵¹⁶ ₋₄₂₁	747 ⁺¹⁰⁶¹ ₋₂₂₂	1204 ⁺¹⁵⁶⁹ ₋₅₈₁
5565	0.52 [†]	56.94 ^{+0.13} _{-0.13}	43.63 ^{+0.13} _{-0.13}	39 ⁺²⁴ ₋₂₀	57 ⁺²⁷ ₋₂₀	76 ⁺³¹ ₋₄₅	52 ⁺³⁶ ₋₂₉
5566	6.58 ± 0.66	289.87 ^{+0.05} _{-0.05}	291.77 ^{+0.06} _{-0.06}	245 ⁺²²⁴ ₋₉₃	301 ⁺⁴⁴³ ₋₉₃	272 ⁺¹⁹³ ₋₉₁	313 ⁺²⁵¹ ₋₁₂₉
5567*	7.16 ± 0.12	—	—	259 ⁺²⁴⁴ ₋₉₇	319 ⁺⁴⁸³ ₋₉₉	284 ⁺²¹⁰ ₋₉₃	333 ⁺²⁷⁴ ₋₁₃₇
5568*	29.20 ± 0.50	—	—	621 ⁺⁹⁰⁶ ₋₁₉₂	815 ⁺¹⁶⁶⁶ ₋₂₇₂	562 ⁺⁶⁹⁷ ₋₁₅₆	844 ⁺⁹⁸¹ ₋₃₈₄
5569	0.65 ± 0.32	66.01 ^{+0.13} _{-0.12}	51.84 ^{+0.12} _{-0.12}	46 ⁺²⁸ ₋₂₄	64 ⁺³⁵ ₋₂₃	85 ⁺³⁸ ₋₄₈	60 ⁺³⁸ ₋₃₂
5571	4.74 ± 1.28	235.08 ^{+0.03} _{-0.03}	228.45 ^{+0.04} _{-0.04}	196 ⁺¹⁵⁹ ₋₇₉	239 ⁺³¹³ ₋₇₄	230 ⁺¹⁴¹ ₋₈₃	246 ⁺¹⁸⁰ ₋₁₀₂
5572	4.81 ± 1.30	237.29 ^{+0.03} _{-0.03}	230.96 ^{+0.04} _{-0.04}	198 ⁺¹⁶¹ ₋₇₉	241 ⁺³¹⁸ ₋₇₅	232 ⁺¹⁴³ ₋₈₄	249 ⁺¹⁸² ₋₁₀₃
5573	15.40 ± 6.11	499.01 ^{+0.37} _{-0.37}	550.17 ^{+0.47} _{-0.47}	425 ⁺⁵²⁰ ₋₁₄₀	541 ⁺¹⁰⁰⁰ ₋₁₇₂	415 ⁺⁴²⁰ ₋₁₁₈	566 ⁺⁵⁷² ₋₂₄₂
5574	2.13 ± 0.34	141.02 ^{+0.06} _{-0.06}	125.79 ^{+0.07} _{-0.07}	110 ⁺⁷¹ ₋₅₀	136 ⁺¹²⁸ ₋₄₄	153 ⁺⁶⁸ ₋₆₁	136 ⁺⁸² ₋₆₁
5575	3.49 ± 0.19	193.32 ^{+0.04} _{-0.04}	181.81 ^{+0.04} _{-0.04}	158 ⁺¹¹⁶ ₋₆₇	192 ⁺²²⁴ ₋₆₀	197 ⁺¹⁰⁵ ₋₇₇	196 ⁺¹³² ₋₈₃
5576	24.40 ± 12.60	669.55 ^{+0.88} _{-0.88}	775.49 ^{+1.19} _{-1.19}	560 ⁺⁷⁸² ₋₁₇₅	729 ⁺¹⁴⁵⁸ ₋₂₃₉	517 ⁺⁶¹⁰ ₋₁₄₃	758 ⁺⁸⁵⁰ ₋₃₃₉
5581	0.94 ± 0.89	83.80 ^{+0.11} _{-0.11}	68.50 ^{+0.11} _{-0.11}	60 ⁺³⁵ ₋₃₀	80 ⁺⁵¹ ₋₂₇	102 ⁺³⁹ ₋₃₈	76 ⁺⁴⁵ ₋₃₈
5585	5.14 ± 0.59	247.56 ^{+0.04} _{-0.04}	242.68 ^{+0.04} _{-0.04}	207 ⁺¹⁷³ ₋₈₂	253 ⁺³⁴¹ ₋₇₈	240 ⁺¹⁵³ ₋₈₅	261 ⁺¹⁹⁵ ₋₁₀₈
5589	0.71 ± 0.27	69.78 ^{+0.12} _{-0.12}	55.32 ^{+0.12} _{-0.12}	49 ⁺²⁹ ₋₂₅	68 ⁺³⁸ ₋₂₄	89 ⁺³⁴ ₋₃₃	63 ⁺³⁹ ₋₃₃
5590	0.66 ± 0.23	66.72 ^{+0.12} _{-0.12}	52.50 ^{+0.12} _{-0.12}	46 ⁺²⁸ ₋₂₄	65 ⁺³⁵ ₋₂₃	86 ⁺³³ ₋₄₈	60 ⁺³⁸ ₋₃₂
5591*	7.50 ± 0.20	—	—	268 ⁺²⁵⁶ ₋₉₉	330 ⁺⁵⁰⁶ ₋₁₀₂	291 ⁺²¹⁹ ₋₉₄	344 ⁺²⁸⁷ ₋₁₄₂
5592	5.21 [†]	249.71 ^{+0.04} _{-0.04}	245.14 ^{+0.04} _{-0.04}	209 ⁺¹⁷⁵ ₋₇₉	255 ⁺³⁴⁶ ₋₈₆	242 ⁺¹⁵⁵ ₋₉₂	264 ⁺¹⁹⁸ ₋₁₀₉
5593	3.03 ± 0.33	176.63 ^{+0.04} _{-0.04}	163.62 ^{+0.05} _{-0.05}	142 ⁺¹⁰⁰ ₋₆₂	174 ⁺¹⁹¹ ₋₅₅	183 ⁺⁹² ₋₇₄	177 ⁺¹¹⁴ ₋₇₆
5594	2.12 ± 0.95	140.60 ^{+0.06} _{-0.06}	125.35 ^{+0.07} _{-0.07}	110 ⁺⁷⁰ ₋₅₀	136 ⁺¹²⁸ ₋₄₄	153 ⁺⁶⁷ ₋₆₈	136 ⁺⁸² ₋₆₁
5595	19.10 ± 4.14	572.59 ^{+0.56} _{-0.56}	646.02 ^{+0.74} _{-0.74}	485 ⁺⁶³³ ₋₁₅₅	623 ⁺¹²⁰¹ ₋₂₀₁	460 ⁺⁵⁰³ ₋₁₂₉	650 ⁺⁶⁹¹ ₋₂₈₄
5597	6.69 ± 0.42	292.96 ^{+0.06} _{-0.06}	295.40 ^{+0.06} _{-0.06}	248 ⁺²²⁸ ₋₉₄	304 ⁺⁴⁵⁰ ₋₉₄	274 ⁺¹⁹⁶ ₋₉₁	317 ⁺²⁵⁵ ₋₁₃₁
5599	25.20 ± 2.72	683.50 ^{+0.93} _{-0.93}	794.38 ^{+1.27} _{-1.27}	571 ⁺⁸⁰⁴ ₋₁₇₈	744 ⁺¹⁴⁹⁵ ₋₂₄₅	525 ⁺⁶²⁵ ₋₁₄₆	773 ⁺⁸⁷² ₋₃₄₆
5601	5.22 ± 0.29	250.02 ^{+0.04} _{-0.04}	245.49 ^{+0.04} _{-0.04}	209 ⁺¹⁷⁶ ₋₈₃	255 ⁺³⁴⁷ ₋₇₉	242 ⁺¹⁵⁵ ₋₈₆	264 ⁺¹⁹⁸ ₋₁₁₀
5603	15.80 ± 1.60	507.25 ^{+0.39} _{-0.39}	560.79 ^{+0.50} _{-0.50}	432 ⁺⁵³³ ₋₁₄₂	550 ⁺¹⁰²³ ₋₁₇₅	420 ⁺⁴²⁹ ₋₁₂₀	575 ⁺⁵⁸⁵ ₋₂₄₇
5604	13.60 ± 0.59	460.92 ^{+0.29} _{-0.29}	501.45 ^{+0.36} _{-0.36}	394 ⁺⁴⁶³ ₋₁₃₂	497 ⁺⁸⁹⁶ ₋₁₅₇	391 ⁺³⁷⁷ ₋₁₁₃	521 ⁺⁵¹⁰ ₋₂₂₁
5605	1.88 [†]	130.21 ^{+0.07} _{-0.07}	114.61 ^{+0.07} _{-0.07}	101 ⁺⁶³ ₋₄₇	125 ⁺¹¹¹ ₋₄₁	144 ⁺⁶¹ ₋₆₅	124 ⁺⁷³ ₋₅₆
5606*	4.73 ± 0.29	—	—	195 ⁺¹⁵⁹ ₋₇₉	238 ⁺³¹² ₋₇₄	230 ⁺¹⁴¹ ₋₈₃	246 ⁺¹⁷⁹ ₋₁₀₂
5607	19.70 ± 1.65	584.02 ^{+0.60} _{-0.60}	661.09 ^{+0.79} _{-0.79}	494 ⁺⁶⁵¹ ₋₁₅₇	636 ⁺¹²³² ₋₂₀₅	467 ⁺⁵¹⁵ ₋₁₃₁	663 ⁺⁷¹⁰ ₋₂₉₀
5608	3.62 ± 0.96	197.89 ^{+0.04} _{-0.04}	186.84 ^{+0.04} _{-0.04}	162 ⁺¹²⁰ ₋₆₈	197 ⁺²³³ ₋₆₂	200 ⁺¹⁰⁹ ₋₇₈	202 ⁺¹³⁶ ₋₈₅
5610	0.84 ± 0.29	78.13 ^{+0.11} _{-0.11}	63.12 ^{+0.11} _{-0.11}	56 ⁺³³ ₋₂₈	75 ⁺⁴⁶ ₋₂₆	96 ⁺³⁷ ₋₅₂	71 ⁺⁴³ ₋₃₆
5612	40.50 ± 5.88	925.47 ^{+1.99} _{-1.98}	1131.68 ^{+2.89} _{-2.88}	745 ⁺¹¹⁶¹ ₋₂₂₉	991 ⁺²⁰⁸² ₋₃₄₁	651 ⁺⁸⁷⁴ ₋₁₈₆	1017 ⁺¹²⁵⁷ ₋₄₇₈
5614	6.37 ± 0.03	283.93 ^{+0.05} _{-0.05}	284.79 ^{+0.06} _{-0.06}	240 ⁺²¹⁶ ₋₉₁	294 ⁺⁴²⁸ ₋₉₁	268 ⁺¹⁸⁷ ₋₉₀	306 ⁺²⁴³ ₋₁₂₆
5615	0.32 [†]	41.76 ^{+0.14} _{-0.14}	30.38 ^{+0.13} _{-0.13}	28 ⁺¹⁹ ₋₁₅	44 ⁺¹⁸ ₋₁₆	62 ⁺²⁹ ₋₃₉	40 ⁺³³ ₋₂₃
5617	9.50 ± 0.51	366.51 ^{+0.13} _{-0.13}	383.71 ^{+0.15} _{-0.15}	313 ⁺³²⁶ ₋₁₁₁	389 ⁺⁶⁴⁰ ₋₁₂₁	327 ⁺²⁷³ ₋₁₀₁	407 ⁺³⁶² ₋₁₆₉
5618	18.00 ± 5.22	551.30 ^{+0.50} _{-0.50}	618.06 ^{+0.66} _{-0.66}	468 ⁺⁶⁰⁰ ₋₁₅₁	600 ⁺¹¹⁴³ ₋₁₉₂	447 ⁺⁴⁷⁹ ₋₁₂₆	626 ⁺⁶⁵⁷ ₋₂₇₂
5619	9.53 ± 4.82	367.25 ^{+0.13} _{-0.13}	384.62 ^{+0.15} _{-0.15}	314 ⁺³²⁷ ₋₁₁₁	390 ⁺⁶⁴² ₋₁₂₁	328 ⁺²⁷⁴ ₋₁₀₁	408 ⁺³⁶⁴ ₋₁₇₀
5620	3.33 [†]	187.61 ^{+0.04} _{-0.04}	175.55 ^{+0.04} _{-0.04}	152 ⁺¹¹⁰ ₋₆₅	186 ⁺²¹² ₋₅₈	192 ⁺¹⁰¹ ₋₇₆	189 ⁺¹²⁵ ₋₈₁
5621*	5.41 ± 0.11	—	—	214 ⁺¹⁸² ₋₈₄	262 ⁺³⁶¹ ₋₈₁	246 ⁺¹⁶⁰ ₋₈₆	272 ⁺²⁰⁶ ₋₁₁₂
5622	0.44 ± 0.22	51.19 ^{+0.14} _{-0.14}	38.53 ^{+0.13} _{-0.13}	34 ⁺²² ₋₁₈	52 ⁺²⁴ ₋₁₉	71 ⁺³⁰ ₋₂₆	47 ⁺³⁴ ₋₂₆
5624*	7.28 ± 0.74	—	—	262 ⁺²⁴⁸ ₋₉₈	323 ⁺⁴⁹¹ ₋₁₀₀	280 ⁺²¹³ ₋₉₃	337 ⁺²⁷⁸ ₋₁₃₉
5626	6.55 ± 3.52	289.03 ^{+0.05} _{-0.05}	290.77 ^{+0.06} _{-0.06}	244 ⁺²²³ ₋₉₃	300 ⁺⁴⁴¹ ₋₉₃	271 ⁺¹⁹³ ₋₉₁	312 ⁺²⁵⁰ ₋₁₂₉
5627	0.49 [†]	55.52 ^{+0.13} _{-0.13}	42.36 ^{+0.13} _{-0.13}	38 ⁺²⁴ ₋₂₀	55 ⁺²⁶ ₋₂₀	75 ⁺³¹ ₋₄₄	51 ⁺³⁵ ₋₂₈
5628	4.15 ± 0.17	215.94 ^{+0.03} _{-0.03}	206.88 ^{+0.04} _{-0.04}	178 ⁺¹³⁸ ₋₇₃	217 ⁺²⁷¹ ₋₈₁	215 ⁺¹²⁴ ₋₆₈	223 ⁺¹⁵⁷ ₋₉₄
5629*	3.77 ± 0.11	—	—	166 ⁺¹²⁵ ₋₇₀	203 ⁺²⁴⁴ ₋₆₃	205 ⁺¹¹³ ₋₇₉	208 ⁺¹⁴² ₋₈₈

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
5631	0.83 ± 0.14	$77.24^{+0.12}_{-0.12}$	$62.28^{+0.11}_{-0.11}$	55^{+32}_{-28}	74^{+45}_{-26}	96^{+36}_{-52}	70^{+42}_{-36}
5632*	27.30 ± 1.92	—	—	598^{+858}_{-185}	782^{+1587}_{-259}	545^{+664}_{-151}	811^{+930}_{-366}
5633	1.95 ± 1.75	$133.29^{+0.07}_{-0.07}$	$117.78^{+0.07}_{-0.07}$	103^{+65}_{-48}	128^{+116}_{-42}	146^{+63}_{-66}	128^{+76}_{-58}
5634	0.40 ± 0.36	$48.14^{+0.14}_{-0.14}$	$35.86^{+0.13}_{-0.13}$	32^{+21}_{-17}	49^{+22}_{-18}	68^{+30}_{-41}	45^{+34}_{-25}
5635	4.60 ± 1.52	$230.62^{+0.03}_{-0.03}$	$223.39^{+0.04}_{-0.04}$	192^{+154}_{-77}	233^{+303}_{-73}	227^{+137}_{-83}	241^{+174}_{-100}
5637	5.17 ± 0.67	$248.48^{+0.04}_{-0.04}$	$243.73^{+0.04}_{-0.04}$	208^{+174}_{-82}	254^{+344}_{-79}	241^{+153}_{-85}	263^{+196}_{-109}
5638	9.65 ± 4.44	$370.20^{+0.13}_{-0.13}$	$388.22^{+0.16}_{-0.16}$	316^{+331}_{-112}	393^{+650}_{-122}	330^{+277}_{-101}	412^{+368}_{-171}
5640	2.08 ± 1.19	$138.90^{+0.06}_{-0.06}$	$123.58^{+0.07}_{-0.07}$	108^{+69}_{-50}	134^{+125}_{-43}	151^{+66}_{-67}	134^{+80}_{-60}
5642	3.52 ± 0.30	$194.38^{+0.04}_{-0.04}$	$182.97^{+0.04}_{-0.04}$	159^{+117}_{-67}	193^{+226}_{-77}	198^{+106}_{-84}	197^{+133}_{-84}
5644	7.37 ± 0.49	$311.64^{+0.07}_{-0.07}$	$317.52^{+0.07}_{-0.07}$	265^{+98}_{-89}	326^{+101}_{-101}	288^{+94}_{-94}	340^{+140}_{-140}
5645	1.96 ± 0.55	$133.73^{+0.07}_{-0.07}$	$118.23^{+0.07}_{-0.07}$	104^{+65}_{-48}	129^{+117}_{-42}	147^{+63}_{-66}	128^{+76}_{-58}
5646	4.01 ± 1.69	$211.26^{+0.03}_{-0.03}$	$201.65^{+0.04}_{-0.04}$	174^{+133}_{-72}	212^{+261}_{-66}	211^{+120}_{-80}	218^{+151}_{-91}
5647	77.10 ± 14.20	$1396.28^{+4.94}_{-4.93}$	$1829.26^{+7.75}_{-7.71}$	1041^{+1747}_{-332}	1408^{+2994}_{-520}	858^{+1267}_{-270}	1420^{+1949}_{-702}
5648	1.10 ± 0.62	$92.46^{+0.10}_{-0.10}$	$76.84^{+0.10}_{-0.10}$	68^{+40}_{-33}	88^{+61}_{-30}	110^{+42}_{-56}	85^{+49}_{-42}
5650	42.40 ± 15.00	$952.98^{+2.13}_{-2.13}$	$1171.04^{+3.11}_{-3.10}$	764^{+1200}_{-235}	1018^{+2143}_{-352}	665^{+900}_{-190}	1043^{+1299}_{-492}
5654*	6.08 ± 0.10	—	—	232^{+206}_{-89}	284^{+408}_{-88}	261^{+232}_{-179}	296^{+232}_{-122}
5655	1.12 ± 0.47	$93.53^{+0.10}_{-0.10}$	$77.88^{+0.10}_{-0.10}$	69^{+40}_{-34}	89^{+62}_{-30}	111^{+42}_{-56}	86^{+50}_{-42}
5664	3.23 ± 3.09	$183.99^{+0.04}_{-0.04}$	$171.61^{+0.04}_{-0.04}$	149^{+107}_{-64}	182^{+205}_{-57}	189^{+98}_{-76}	185^{+122}_{-79}
5667	3.50 ± 1.22	$193.67^{+0.04}_{-0.04}$	$182.20^{+0.04}_{-0.04}$	158^{+116}_{-67}	193^{+224}_{-60}	197^{+106}_{-83}	197^{+132}_{-83}
5669	1.37 ± 0.32	$106.38^{+0.09}_{-0.09}$	$90.51^{+0.09}_{-0.09}$	80^{+47}_{-38}	102^{+78}_{-34}	122^{+48}_{-60}	99^{+57}_{-47}
5697*	0.47 ± 0.07	—	—	37^{+23}_{-19}	54^{+25}_{-19}	74^{+31}_{-44}	50^{+35}_{-27}
5704*	2.11 ± 0.10	—	—	109^{+70}_{-50}	136^{+127}_{-44}	152^{+67}_{-68}	135^{+81}_{-61}
5706	2.44 ± 0.31	$153.81^{+0.05}_{-0.05}$	$139.21^{+0.06}_{-0.06}$	122^{+81}_{-55}	150^{+150}_{-48}	164^{+76}_{-70}	150^{+93}_{-66}
5711	14.90 ± 0.26	$488.60^{+0.35}_{-0.35}$	$536.79^{+0.44}_{-0.44}$	417^{+505}_{-138}	529^{+972}_{-168}	408^{+408}_{-117}	554^{+555}_{-236}
5713	2.27 ± 0.99	$146.88^{+0.06}_{-0.06}$	$131.91^{+0.06}_{-0.06}$	116^{+75}_{-52}	142^{+138}_{-46}	158^{+87}_{-69}	143^{+87}_{-63}
5715	0.38^{\dagger}	$46.73^{+0.14}_{-0.14}$	$34.64^{+0.13}_{-0.13}$	31^{+21}_{-16}	48^{+21}_{-18}	66^{+30}_{-41}	43^{+34}_{-25}
5716	0.54 ± 0.37	$58.55^{+0.13}_{-0.13}$	$45.07^{+0.12}_{-0.12}$	40^{+25}_{-21}	58^{+29}_{-21}	78^{+32}_{-45}	53^{+36}_{-29}
5718	2.46 ± 2.05	$154.61^{+0.05}_{-0.05}$	$140.06^{+0.06}_{-0.06}$	122^{+81}_{-55}	151^{+151}_{-48}	165^{+76}_{-70}	151^{+93}_{-67}
5719	3.42 ± 0.64	$190.83^{+0.04}_{-0.04}$	$179.08^{+0.04}_{-0.04}$	155^{+113}_{-66}	189^{+103}_{-59}	195^{+103}_{-82}	193^{+129}_{-82}
5721	9.05 ± 0.78	$355.33^{+0.11}_{-0.11}$	$370.07^{+0.13}_{-0.13}$	303^{+310}_{-109}	376^{+611}_{-117}	319^{+261}_{-99}	394^{+346}_{-163}
5723	1.88 ± 1.74	$130.21^{+0.07}_{-0.07}$	$114.61^{+0.07}_{-0.07}$	101^{+63}_{-47}	125^{+111}_{-41}	144^{+61}_{-56}	124^{+73}_{-56}
5724	21.90 ± 6.58	$624.88^{+0.73}_{-0.73}$	$715.42^{+0.97}_{-0.97}$	526^{+714}_{-166}	681^{+1341}_{-221}	491^{+561}_{-137}	709^{+777}_{-313}
5725	15.70 ± 0.97	$505.20^{+0.39}_{-0.39}$	$558.14^{+0.49}_{-0.49}$	430^{+530}_{-141}	548^{+1017}_{-174}	419^{+427}_{-119}	573^{+582}_{-246}
5726	1.11 ± 0.15	$93.00^{+0.10}_{-0.10}$	$77.36^{+0.10}_{-0.10}$	68^{+40}_{-34}	89^{+62}_{-30}	110^{+42}_{-42}	85^{+49}_{-42}
5729	1.86 ± 0.14	$129.33^{+0.07}_{-0.07}$	$113.70^{+0.07}_{-0.07}$	100^{+62}_{-46}	124^{+110}_{-40}	143^{+60}_{-65}	123^{+73}_{-56}
5730	5.47 ± 2.79	$257.60^{+0.04}_{-0.04}$	$254.21^{+0.04}_{-0.04}$	216^{+185}_{-85}	264^{+365}_{-82}	248^{+162}_{-87}	274^{+208}_{-113}
5731*	2.56 ± 0.25	—	—	126^{+84}_{-56}	155^{+158}_{-49}	168^{+79}_{-71}	156^{+97}_{-68}
5733	4.86^{\dagger}	$238.86^{+0.03}_{-0.03}$	$232.75^{+0.04}_{-0.04}$	199^{+163}_{-80}	243^{+322}_{-75}	233^{+145}_{-84}	251^{+184}_{-104}
5736	1.36^{\dagger}	$105.88^{+0.09}_{-0.09}$	$90.02^{+0.09}_{-0.09}$	79^{+47}_{-38}	101^{+77}_{-34}	122^{+48}_{-60}	98^{+57}_{-47}
5740	26.00 ± 9.72	$697.28^{+0.98}_{-0.98}$	$813.11^{+1.34}_{-1.34}$	581^{+825}_{-181}	759^{+1530}_{-250}	532^{+640}_{-148}	787^{+895}_{-354}
5770	19.40 ± 8.46	$578.32^{+0.58}_{-0.58}$	$653.57^{+0.77}_{-0.77}$	489^{+642}_{-156}	630^{+1216}_{-203}	464^{+509}_{-130}	657^{+701}_{-287}
5773*	1.93 ± 0.03	—	—	103^{+64}_{-48}	128^{+115}_{-41}	145^{+66}_{-57}	127^{+75}_{-57}
5867	3.59 ± 0.72	$196.84^{+0.04}_{-0.04}$	$185.68^{+0.04}_{-0.04}$	161^{+119}_{-68}	196^{+231}_{-61}	200^{+108}_{-78}	200^{+135}_{-85}
5890	0.67^{\dagger}	$67.43^{+0.12}_{-0.12}$	$53.15^{+0.12}_{-0.12}$	47^{+28}_{-24}	66^{+36}_{-23}	86^{+34}_{-48}	61^{+39}_{-32}
5955	1.36 ± 0.77	$105.88^{+0.09}_{-0.09}$	$90.02^{+0.09}_{-0.09}$	79^{+47}_{-38}	101^{+77}_{-34}	122^{+48}_{-60}	98^{+57}_{-47}
5983	10.80 ± 2.55	$397.81^{+0.17}_{-0.17}$	$422.23^{+0.21}_{-0.21}$	340^{+370}_{-118}	425^{+724}_{-133}	349^{+307}_{-105}	445^{+411}_{-186}
5989	0.76 ± 0.04	$72.95^{+0.12}_{-0.12}$	$58.26^{+0.12}_{-0.12}$	51^{+30}_{-26}	70^{+41}_{-24}	92^{+35}_{-50}	66^{+40}_{-34}
5992	1.25^{\dagger}	$100.33^{+0.09}_{-0.09}$	$84.53^{+0.10}_{-0.10}$	74^{+44}_{-36}	96^{+70}_{-32}	117^{+45}_{-45}	93^{+53}_{-45}
5995*	23.10 ± 0.22	—	—	543^{+747}_{-170}	704^{+1398}_{-230}	504^{+585}_{-140}	733^{+812}_{-326}

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
6004	1.15 ± 0.24	95.13 ^{+0.10} _{-0.10}	79.43 ^{+0.10} _{-0.10}	70 ⁺⁴¹ ₋₃₄	91 ⁺⁶⁴ ₋₃₀	112 ⁺⁴³ ₋₅₇	87 ⁺⁵¹ ₋₄₃
6082	1.04 ± 0.36	89.21 ^{+0.10} _{-0.10}	73.69 ^{+0.11} _{-0.11}	65 ⁺³⁸ ₋₃₂	85 ⁺⁵⁷ ₋₂₉	107 ⁺⁴¹ ₋₅₅	82 ⁺⁴⁸ ₋₄₀
6083	1.39 ± 0.50	107.37 ^{+0.09} _{-0.09}	91.49 ^{+0.09} _{-0.09}	81 ⁺⁴⁸ ₋₃₉	103 ⁺⁷⁹ ₋₃₄	123 ⁺⁴⁹ ₋₆₀	100 ⁺⁵⁸ ₋₄₇
6090	2.60 ± 0.42	160.18 ^{+0.05} _{-0.05}	145.97 ^{+0.05} _{-0.05}	128 ⁺⁸⁶ ₋₅₇	156 ⁺¹⁶¹ ₋₅₀	169 ⁺⁸⁰ ₋₇₁	158 ⁺⁹⁹ ₋₆₉
6091	0.84 ± 0.61	77.71 ^{+0.11} _{-0.11}	62.73 ^{+0.11} _{-0.11}	55 ⁺³³ ₋₂₈	75 ⁺⁴⁵ ₋₂₆	96 ⁺³⁷ ₋₅₂	71 ⁺⁴² ₋₃₆
6096	10.20 ± 2.55	383.54 ^{+0.15} _{-0.15}	404.61 ^{+0.18} _{-0.18}	328 ⁺³⁵⁰ ₋₁₁₅	409 ⁺⁶⁸⁶ ₋₁₂₇	339 ⁺²⁹² ₋₁₀₃	428 ⁺³⁸⁸ ₋₁₇₈
6098	1.48 ± 0.26	111.76 ^{+0.08} _{-0.08}	95.88 ^{+0.09} _{-0.09}	84 ⁺⁵¹ ₋₄₀	107 ⁺⁸⁵ ₋₃₅	127 ⁺⁵¹ ₋₆₁	104 ⁺⁶⁰ ₋₄₉
6100*	13.10 ± 0.16	—	—	384 ⁺⁴⁴⁷ ₋₁₂₉	485 ⁺⁸⁶⁶ ₋₁₅₃	384 ⁺³⁶⁵ ₋₁₁₂	508 ⁺⁴⁹³ ₋₂₁₅
6101	2.14 ± 0.45	141.45 ^{+0.06} _{-0.06}	126.23 ^{+0.07} _{-0.07}	111 ⁺⁷¹ ₋₅₁	137 ⁺¹²⁹ ₋₄₄	153 ⁺⁶⁸ ₋₄₃	137 ⁺⁸² ₋₅₁
6102	1.16 ± 0.75	95.65 ^{+0.10} _{-0.10}	79.95 ^{+0.10} _{-0.10}	70 ⁺⁴¹ ₋₃₅	91 ⁺⁶⁵ ₋₃₁	113 ⁺⁴³ ₋₅₇	88 ⁺⁵¹ ₋₄₃
6103	2.61 ± 0.35	160.57 ^{+0.05} _{-0.05}	146.38 ^{+0.05} _{-0.05}	128 ⁺⁸⁶ ₋₅₇	157 ⁺¹⁶² ₋₅₀	170 ⁺⁸¹ ₋₇₂	158 ⁺⁹⁹ ₋₆₉
6104	0.53 ± 0.47	57.99 ^{+0.13} _{-0.13}	44.57 ^{+0.13} _{-0.12}	40 ⁺²⁵ ₋₂₁	57 ⁺²⁸ ₋₂₀	77 ⁺³² ₋₄₅	53 ⁺³⁶ ₋₂₉
6105	6.61 [†]	290.71 ^{+0.06} _{-0.06}	292.76 ^{+0.06} _{-0.06}	246 ⁺²²⁵ ₋₉₃	302 ⁺⁴⁴⁵ ₋₉₃	273 ⁺¹⁹⁴ ₋₉₁	314 ⁺²⁵² ₋₁₃₀
6111	10.10 ± 0.89	381.14 ^{+0.15} _{-0.15}	401.65 ^{+0.18} _{-0.18}	326 ⁺³⁴⁶ ₋₁₁₄	406 ⁺⁶⁷⁹ ₋₁₂₆	337 ⁺²⁸⁹ ₋₁₀₃	425 ⁺³⁸⁵ ₋₁₇₇
6113	2.64 ± 0.30	161.75 ^{+0.05} _{-0.05}	147.64 ^{+0.05} _{-0.05}	129 ⁺⁸⁷ ₋₅₇	158 ⁺¹⁶⁴ ₋₅₀	171 ⁺⁸¹ ₋₇₂	159 ⁺¹⁰⁰ ₋₇₀
6115*	16.40 ± 0.54	—	—	442 ⁺⁵⁵² ₋₁₄₄	564 ⁺¹⁰⁵⁶ ₋₁₈₀	428 ⁺⁴⁴³ ₋₁₂₁	590 ⁺⁶⁰⁵ ₋₂₅₄
6117	15.90 ± 3.96	509.30 ^{+0.40} _{-0.40}	563.43 ^{+0.51} _{-0.51}	434 ⁺⁵³⁶ ₋₁₄₂	552 ⁺¹⁰²⁹ ₋₁₇₆	422 ⁺⁴³² ₋₁₂₀	578 ⁺⁵⁸⁸ ₋₂₄₈
6118	1.12 ± 0.35	93.53 ^{+0.10} _{-0.10}	77.88 ^{+0.10} _{-0.10}	69 ⁺⁴⁰ ₋₃₄	89 ⁺⁶² ₋₃₀	111 ⁺⁴² ₋₅₆	86 ⁺⁵⁰ ₋₄₂
6119	4.26 ± 3.53	219.58 ^{+0.03} _{-0.03}	210.96 ^{+0.04} _{-0.04}	181 ⁺¹⁴² ₋₇₄	221 ⁺²⁷⁹ ₋₆₉	218 ⁺¹²⁷ ₋₉₅	228 ⁺¹⁶¹ ₋₉₅
6120	18.90 ± 10.50	568.75 ^{+0.55} _{-0.55}	640.96 ^{+0.73} _{-0.73}	482 ⁺⁶²⁷ ₋₁₅₄	619 ⁺¹¹⁹⁰ ₋₁₉₉	458 ⁺⁴⁹⁸ ₋₁₂₈	646 ⁺⁶⁸⁵ ₋₂₈₂
6123	44.40 ± 4.28	981.45 ^{+2.28} _{-2.28}	1212.00 ^{+3.35} _{-3.34}	783 ⁺¹²³⁹ ₋₂₄₁	1045 ⁺²²⁰⁵ ₋₃₆₃	678 ⁺⁹²⁷ ₋₁₉₅	1070 ⁺¹³⁴³ ₋₅₀₇
6124*	9.72 ± 0.08	—	—	318 ⁺³³³ ₋₁₁₂	395 ⁺⁶⁵⁵ ₋₁₂₃	331 ⁺²⁷⁹ ₋₁₇₂	414 ⁺³⁷¹ ₋₁₇₂
6127	17.30 ± 3.05	537.51 ^{+0.47} _{-0.47}	600.04 ^{+0.61} _{-0.61}	457 ⁺⁵⁷⁹ ₋₁₄₈	584 ⁺¹¹⁰⁶ ₋₁₈₇	439 ⁺⁴⁶³ ₋₁₂₄	610 ⁺⁶³⁴ ₋₂₆₄
6128	0.66 ± 0.17	66.52 ^{+0.12} _{-0.12}	52.32 ^{+0.12} _{-0.12}	46 ⁺²⁸ ₋₂₄	65 ⁺³⁵ ₋₂₃	86 ⁺³³ ₋₄₈	60 ⁺³⁸ ₋₃₂
6131	12.30 ± 4.44	432.27 ^{+0.23} _{-0.23}	465.24 ^{+0.29} _{-0.28}	369 ⁺⁴²⁰ ₋₁₂₆	465 ⁺⁸¹⁸ ₋₁₄₆	372 ⁺³⁴⁵ ₋₁₀₉	487 ⁺⁴⁶⁵ ₋₂₀₅
6134	2.37 [†]	150.98 ^{+0.05} _{-0.05}	136.22 ^{+0.06} _{-0.06}	119 ⁺⁷⁸ ₋₅₄	147 ⁺¹⁴⁵ ₋₄₇	161 ⁺⁷⁴ ₋₇₀	147 ⁺⁹⁰ ₋₆₅
6135	30.20 ± 10.40	767.27 ^{+1.25} _{-1.25}	909.20 ^{+1.76} _{-1.75}	633 ⁺⁹³¹ ₋₁₉₅	832 ⁺¹⁷⁰⁷ ₋₂₇₈	570 ⁺⁷¹⁴ ₋₁₅₉	861 ⁺¹⁰⁰⁷ ₋₃₉₃
6136	1.47 ± 0.95	111.28 ^{+0.08} _{-0.08}	95.39 ^{+0.09} _{-0.09}	84 ⁺⁵⁰ ₋₄₀	106 ⁺⁸⁴ ₋₃₅	127 ⁺⁵¹ ₋₆₁	104 ⁺⁶⁰ ₋₄₉
6137	6.65 ± 5.09	291.84 ^{+0.06} _{-0.06}	294.08 ^{+0.06} _{-0.06}	247 ⁺²²⁶ ₋₉₄	303 ⁺⁴⁴⁸ ₋₉₄	273 ⁺¹⁹⁵ ₋₁₃₀	316 ⁺²⁵⁴ ₋₁₂₉
6139	3.47 ± 2.83	192.61 ^{+0.04} _{-0.04}	181.03 ^{+0.04} _{-0.04}	157 ⁺¹¹⁵ ₋₆₇	191 ⁺²²² ₋₆₀	196 ⁺¹⁰⁵ ₋₈₃	195 ⁺¹³¹ ₋₈₃
6141	8.75 ± 2.55	347.76 ^{+0.11} _{-0.11}	360.88 ^{+0.12} _{-0.12}	296 ⁺³⁰⁰ ₋₁₀₇	367 ⁺⁵⁹¹ ₋₁₁₄	314 ⁺²⁵³ ₋₉₈	384 ⁺³³⁴ ₋₁₅₉
6145	7.21 ± 2.45	307.31 ^{+0.07} _{-0.07}	312.36 ^{+0.07} _{-0.07}	261 ⁺²⁴⁶ ₋₉₇	321 ⁺⁴⁸⁶ ₋₉₉	283 ⁺²¹¹ ₋₉₃	335 ⁺²⁷⁵ ₋₁₃₈
6147	1.26 ± 0.40	100.84 ^{+0.09} _{-0.09}	85.03 ^{+0.10} _{-0.10}	75 ⁺⁴⁴ ₋₃₇	96 ⁺⁷¹ ₋₃₂	117 ⁺⁴⁶ ₋₅₈	93 ⁺⁵⁴ ₋₄₅
6148	8.04 ± 1.71	329.46 ^{+0.09} _{-0.09}	338.81 ^{+0.10} _{-0.10}	280 ⁺²⁷⁵ ₋₁₀₃	346 ⁺⁵⁴³ ₋₁₀₇	301 ⁺²³⁴ ₋₉₆	362 ⁺³⁰⁷ ₋₁₅₀
6149	14.30 [†]	475.94 ^{+0.32} _{-0.32}	520.58 ^{+0.40} _{-0.40}	406 ⁺⁴⁸⁵ ₋₁₃₅	515 ⁺⁹³⁷ ₋₁₆₃	400 ⁺³⁹⁴ ₋₁₁₅	539 ⁺⁵³⁴ ₋₂₂₉
6151	12.70 ± 3.24	441.20 ^{+0.25} _{-0.25}	476.48 ^{+0.31} _{-0.31}	377 ⁺⁴³³ ₋₁₂₈	475 ⁺⁸⁴² ₋₁₄₉	378 ⁺³⁵⁵ ₋₁₁₁	497 ⁺⁴⁷⁹ ₋₂₁₀
6152	3.45 ± 1.10	191.90 ^{+0.04} _{-0.04}	180.25 ^{+0.04} _{-0.04}	156 ⁺¹¹⁴ ₋₆₆	191 ⁺²²¹ ₋₆₀	196 ⁺¹⁰⁴ ₋₇₇	195 ⁺¹³⁰ ₋₈₃
6153	7.08 ± 5.04	303.75 ^{+0.06} _{-0.06}	308.15 ^{+0.07} _{-0.07}	257 ⁺²⁴¹ ₋₉₆	317 ⁺⁴⁷⁷ ₋₉₈	282 ⁺²⁰⁷ ₋₉₃	330 ⁺²⁷⁰ ₋₁₃₆
6154	1.57 ± 0.28	116.05 ^{+0.08} _{-0.08}	100.19 ^{+0.09} _{-0.09}	88 ⁺⁵³ ₋₄₂	111 ⁺⁹¹ ₋₃₆	131 ⁺⁵³ ₋₆₂	109 ⁺⁶³ ₋₅₁
6158	1.12 [†]	93.53 ^{+0.10} _{-0.10}	77.88 ^{+0.10} _{-0.10}	69 ⁺⁴⁰ ₋₃₄	89 ⁺⁶² ₋₃₀	111 ⁺⁴² ₋₅₆	86 ⁺⁵⁰ ₋₄₂
6159	0.74 ± 0.09	71.72 ^{+0.12} _{-0.12}	57.11 ^{+0.12} _{-0.12}	50 ⁺³⁰ ₋₂₆	69 ⁺⁴⁰ ₋₂₄	90 ⁺³⁵ ₋₅₀	65 ⁺⁴⁰ ₋₃₄
6160	1.60 ± 0.89	117.47 ^{+0.08} _{-0.08}	101.62 ^{+0.08} _{-0.08}	89 ⁺⁵⁴ ₋₄₂	112 ⁺⁹³ ₋₃₇	132 ⁺⁵⁴ ₋₆₃	110 ⁺⁶⁴ ₋₅₁
6165	1.44 ± 0.83	109.82 ^{+0.09} _{-0.09}	93.94 ^{+0.09} _{-0.09}	83 ⁺⁴⁹ ₋₄₀	105 ⁺⁸² ₋₃₅	125 ⁺⁵⁰ ₋₆₁	102 ⁺⁵⁹ ₋₄₈
6166	4.24 [†]	218.92 ^{+0.03} _{-0.03}	210.22 ^{+0.04} _{-0.04}	181 ⁺¹⁴¹ ₋₇₄	220 ⁺²⁷⁷ ₋₆₉	217 ⁺¹²⁷ ₋₈₁	227 ⁺¹⁶⁰ ₋₉₅
6167	0.63 ± 0.14	64.63 ^{+0.13} _{-0.13}	50.58 ^{+0.12} _{-0.12}	45 ⁺²⁷ ₋₂₃	63 ⁺³³ ₋₂₂	84 ⁺³³ ₋₄₇	59 ⁺³⁸ ₋₃₁
6168	15.90 ± 0.17	509.30 ^{+0.40} _{-0.40}	563.43 ^{+0.51} _{-0.51}	434 ⁺⁵³⁶ ₋₁₄₂	552 ⁺¹⁰²⁹ ₋₁₇₆	422 ⁺⁴³² ₋₁₂₀	578 ⁺⁵⁸⁸ ₋₂₄₈
6176	0.51 ± 0.44	56.23 ^{+0.13} _{-0.13}	42.99 ^{+0.13} _{-0.13}	38 ⁺²⁴ ₋₂₀	56 ⁺²⁷ ₋₂₀	76 ⁺³¹ ₋₄₄	51 ⁺³⁵ ₋₂₈
6178	39.60 ± 15.00	912.28 ^{+1.92} _{-1.92}	1112.86 ^{+2.78} _{-2.78}	736 ⁺¹¹⁴³ ₋₂₂₆	978 ⁺²⁰⁵² ₋₃₃₆	645 ⁺⁸⁶¹ ₋₁₈₃	1005 ⁺¹²³⁶ ₋₄₇₁
6180	4.05 ± 3.37	212.60 ^{+0.03} _{-0.03}	203.15 ^{+0.04} _{-0.04}	175 ⁺¹³⁵ ₋₇₂	213 ⁺²⁶⁴ ₋₆₇	212 ⁺¹²¹ ₋₈₀	219 ⁺¹⁵³ ₋₉₂

Continued on next page

Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
6182	23.40 ± 8.14	651.89 ^{+0.82} _{-0.81}	751.66 ^{+1.10} _{-1.10}	547 ⁺⁷⁵⁵ ₋₁₇₁	710 ⁺¹⁴¹² ₋₂₃₂	507 ⁺⁵⁹⁰ ₋₁₄₁	738 ⁺⁸²¹ ₋₃₂₉
6186	0.92 ± 0.37	82.37 ^{+0.11} _{-0.11}	67.14 ^{+0.11} _{-0.11}	59 ⁺³⁵ ₋₃₀	79 ⁺⁵⁰ ₋₂₇	100 ⁺³⁸ ₋₅₃	75 ⁺⁴⁴ ₋₃₈
6188	3.23 ± 2.12	183.99 ^{+0.04} _{-0.04}	171.61 ^{+0.04} _{-0.04}	149 ⁺¹⁰⁷ ₋₆₄	182 ⁺²⁰⁵ ₋₅₇	189 ⁺⁹⁸ ₋₇₆	185 ⁺¹²² ₋₇₉
6189	15.30 ± 1.84	496.94 ^{+0.37} _{-0.37}	547.50 ^{+0.47} _{-0.47}	424 ⁺⁵¹⁷ ₋₁₃₉	538 ⁺⁹⁹⁵ ₋₁₇₁	414 ⁺⁴¹⁸ ₋₁₁₈	563 ⁺⁵⁶⁸ ₋₂₄₁
6190	2.63 ± 1.05	161.36 ^{+0.05} _{-0.05}	147.22 ^{+0.05} _{-0.05}	129 ⁺⁸⁷ ₋₅₇	158 ⁺¹⁶³ ₋₅₀	170 ⁺⁸¹ ₋₇₂	159 ⁺¹⁰⁰ ₋₆₉
6194	0.85 ± 0.15	78.60 ^{+0.11} _{-0.11}	63.56 ^{+0.11} _{-0.11}	56 ⁺³³ ₋₂₈	75 ⁺⁴⁶ ₋₂₆	97 ⁺³⁷ ₋₅₂	71 ⁺⁴³ ₋₃₆
6198*	5.77 ± 0.05	—	—	224 ⁺¹⁹⁵ ₋₈₇	274 ⁺³⁸⁶ ₋₈₅	254 ⁺¹⁷⁰ ₋₈₈	285 ⁺²²⁰ ₋₁₁₈
6204	2.20 [†]	143.97 ^{+0.06} _{-0.06}	128.86 ^{+0.06} _{-0.06}	113 ⁺⁷³ ₋₅₁	139 ⁺¹³³ ₋₄₅	155 ⁺⁶⁹ ₋₆₂	139 ⁺⁸⁴ ₋₆₂
6205	24.80 ± 10.70	676.55 ^{+0.90} _{-0.90}	784.95 ^{+1.23} _{-1.23}	566 ⁺⁷⁹³ ₋₁₇₇	737 ⁺¹⁴⁷⁷ ₋₁₄₅	521 ⁺⁶¹⁷ ₋₁₄₅	765 ⁺⁸⁶¹ ₋₃₄₂
6206	0.31 ± 0.26	40.83 ^{+0.14} _{-0.14}	29.59 ^{+0.13} _{-0.13}	27 ⁺¹⁹ ₋₁₄	43 ⁺¹⁹ ₋₁₆	61 ⁺³³ ₋₃₈	39 ⁺³³ ₋₂₃
6207	3.62 ± 0.43	197.89 ^{+0.04} _{-0.04}	186.84 ^{+0.04} _{-0.04}	162 ⁺¹²⁰ ₋₆₈	197 ⁺²³³ ₋₆₂	200 ⁺¹⁰⁹ ₋₇₈	202 ⁺¹³⁶ ₋₈₅
6209	2.21 ± 0.67	144.38 ^{+0.06} _{-0.06}	129.30 ^{+0.06} _{-0.06}	113 ⁺⁷³ ₋₅₂	140 ⁺¹³⁴ ₋₄₅	150 ⁺⁷⁰ ₋₆₈	140 ⁺⁸⁵ ₋₆₂
6212	1.10 [†]	92.46 ^{+0.10} _{-0.10}	76.84 ^{+0.10} _{-0.10}	68 ⁺⁴⁰ ₋₃₃	88 ⁺⁶¹ ₋₃₀	110 ⁺⁴² ₋₅₆	85 ⁺⁴⁹ ₋₄₂
6214	4.95 ± 0.35	241.68 ^{+0.04} _{-0.04}	235.95 ^{+0.04} _{-0.04}	202 ⁺¹⁶⁶ ₋₈₀	246 ⁺³²⁸ ₋₇₆	235 ⁺¹⁴⁷ ₋₈₄	254 ⁺¹⁸⁸ ₋₁₀₆
6215	62.10 ± 16.00	1216.04 ^{+3.69} _{-3.68}	1556.64 ^{+5.63} _{-5.61}	933 ⁺¹⁵⁴² ₋₂₉₂	1258 ⁺²⁶⁷⁷ ₋₄₅₃	784 ⁺¹¹³¹ ₋₂₃₇	1275 ⁺¹⁶⁹² ₋₆₂₁
6216	1.43 ± 0.40	109.33 ^{+0.09} _{-0.09}	93.45 ^{+0.09} _{-0.09}	82 ⁺⁴⁹ ₋₃₅	104 ⁺⁸² ₋₆₁	125 ⁺⁵⁰ ₋₄₈	102 ⁺⁵⁹ ₋₄₈
6219	21.00 ± 18.90	608.35 ^{+0.67} _{-0.67}	693.37 ^{+0.90} _{-0.90}	513 ⁺⁶⁸⁸ ₋₁₆₂	663 ⁺¹²⁹⁷ ₋₂₁₅	482 ⁺⁵⁴² ₋₁₃₄	691 ⁺⁷⁵⁰ ₋₃₀₄
6222	2.48 ± 0.68	155.42 ^{+0.05} _{-0.05}	140.91 ^{+0.06} _{-0.06}	123 ⁺⁸² ₋₅₅	151 ⁺¹⁵³ ₋₄₈	165 ⁺⁷⁷ ₋₇₁	152 ⁺⁹⁴ ₋₆₇
6223	2.33 ± 2.25	149.34 ^{+0.06} _{-0.06}	134.50 ^{+0.06} _{-0.06}	118 ⁺⁷⁷ ₋₅₃	145 ⁺¹⁴² ₋₄₆	160 ⁺⁷³ ₋₆₉	145 ⁺⁸⁹ ₋₆₄
6225	8.27 ± 1.16	335.45 ^{+0.09} _{-0.09}	346.01 ^{+0.11} _{-0.11}	286 ⁺²⁸³ ₋₁₀₄	353 ⁺⁵⁵⁹ ₋₁₁₀	305 ⁺²⁴⁰ ₋₉₇	369 ⁺³¹⁶ ₋₁₅₃
6226	3.12 ± 0.33	179.96 ^{+0.04} _{-0.04}	167.23 ^{+0.04} _{-0.04}	145 ⁺¹⁰³ ₋₆₃	178 ⁺¹⁹⁸ ₋₅₆	186 ⁺⁹⁵ ₋₇₅	181 ⁺¹¹⁸ ₋₇₇
6227	2.06 [†]	138.04 ^{+0.06} _{-0.06}	122.70 ^{+0.07} _{-0.07}	108 ⁺⁶⁸ ₋₄₉	133 ⁺¹²⁴ ₋₄₃	150 ⁺⁶⁶ ₋₆₇	133 ⁺⁷⁹ ₋₆₀
6228	6.40 ± 2.75	284.78 ^{+0.05} _{-0.05}	285.79 ^{+0.06} _{-0.06}	240 ⁺²¹⁷ ₋₉₂	295 ⁺⁴³⁰ ₋₉₁	268 ⁺¹⁸⁸ ₋₁₂₇	307 ⁺²⁴⁴ ₋₁₂₇
6230	12.00 ± 3.99	425.50 ^{+0.22} _{-0.22}	456.75 ^{+0.27} _{-0.27}	364 ⁺⁴¹⁰ ₋₁₂₄	457 ⁺⁷⁹⁹ ₋₁₄₃	367 ⁺³³⁸ ₋₁₀₉	479 ⁺⁴⁵⁴ ₋₂₀₁
6233	0.47 [†]	53.42 ^{+0.14} _{-0.13}	40.49 ^{+0.13} _{-0.13}	36 ⁺²³ ₋₁₉	54 ⁺²⁵ ₋₁₉	73 ⁺³¹ ₋₄₃	49 ⁺³⁵ ₋₂₇
6234	2.88 ± 1.29	170.99 ^{+0.04} _{-0.04}	157.54 ^{+0.05} _{-0.05}	137 ⁺⁹⁵ ₋₆₀	168 ⁺¹⁸¹ ₋₅₃	178 ⁺⁸⁸ ₋₇₃	170 ⁺¹⁰⁹ ₋₇₃
6235*	8.19 ± 0.14	—	—	284 ⁺²⁸⁰ ₋₁₀₃	351 ⁺⁵⁵³ ₋₁₀₉	304 ⁺²³⁸ ₋₉₇	367 ⁺³¹³ ₋₁₅₂
6236	11.00 ± 2.98	402.50 ^{+0.18} _{-0.18}	428.05 ^{+0.22} _{-0.22}	344 ⁺³⁷⁷ ₋₁₁₉	430 ⁺⁷³⁷ ₋₁₃₅	352 ⁺³¹² ₋₁₀₆	451 ⁺⁴¹⁸ ₋₁₈₉
6237	5.04 ± 3.60	244.47 ^{+0.04} _{-0.04}	239.15 ^{+0.04} _{-0.04}	204 ⁺¹⁶⁹ ₋₈₁	249 ⁺³³⁴ ₋₇₇	237 ⁺¹⁵⁰ ₋₈₅	258 ⁺¹⁹¹ ₋₁₀₇
6238	4.31 [†]	221.22 ^{+0.03} _{-0.03}	212.80 ^{+0.04} _{-0.04}	183 ⁺⁷⁵ ₋₆₉	223 ⁺²⁸² ₋₇₅	219 ⁺¹²⁹ ₋₈₁	230 ⁺¹⁶³ ₋₉₆
6240*	4.90 ± 0.88	—	—	200 ⁺¹⁶⁵ ₋₈₀	244 ⁺³²⁴ ₋₇₆	234 ⁺¹⁴⁶ ₋₈₄	252 ⁺¹⁸⁶ ₋₁₀₅
6241	3.40 ± 0.97	190.12 ^{+0.04} _{-0.04}	178.30 ^{+0.04} _{-0.04}	155 ⁺¹¹³ ₋₆₆	189 ⁺²¹⁷ ₋₅₉	194 ⁺¹⁰³ ₋₇₇	192 ⁺¹²⁸ ₋₈₂
6242	2.43 ± 0.71	153.41 ^{+0.05} _{-0.05}	138.79 ^{+0.06} _{-0.06}	121 ⁺⁸⁰ ₋₅₄	149 ⁺¹⁴⁹ ₋₄₈	164 ⁺⁷⁶ ₋₇₀	150 ⁺⁹² ₋₆₆
6243	7.27 ± 3.07	308.94 ^{+0.07} _{-0.07}	314.30 ^{+0.08} _{-0.08}	262 ⁺²⁴⁸ ₋₉₈	323 ⁺⁴⁹¹ ₋₁₀₀	286 ⁺²¹³ ₋₉₃	337 ⁺²⁷⁸ ₋₁₃₉
6244	3.95 ± 0.88	209.23 ^{+0.03} _{-0.03}	199.40 ^{+0.04} _{-0.04}	172 ⁺¹³¹ ₋₇₁	210 ⁺²⁵⁷ ₋₆₉	210 ⁺¹¹⁸ ₋₈₀	215 ⁺¹⁴⁹ ₋₉₀
6249*	8.28 ± 0.58	—	—	286 ⁺²⁸³ ₋₁₀₄	353 ⁺⁵⁵⁹ ₋₁₁₀	305 ⁺²⁴⁰ ₋₉₇	370 ⁺³¹⁶ ₋₁₅₃
6251	7.92 ± 0.92	326.31 ^{+0.08} _{-0.08}	335.03 ^{+0.09} _{-0.09}	278 ⁺²⁷¹ ₋₁₀₂	343 ⁺⁵³⁵ ₋₁₀₆	299 ⁺²³¹ ₋₉₆	358 ⁺³⁰³ ₋₁₄₈
6263	1.18 ± 0.50	96.70 ^{+0.10} _{-0.10}	80.97 ^{+0.10} _{-0.10}	71 ⁺⁴² ₋₃₅	92 ⁺⁶⁶ ₋₃₁	114 ⁺⁴⁴ ₋₅₇	89 ⁺⁵¹ ₋₄₃
6265	20.60 ± 4.21	600.92 ^{+0.65} _{-0.65}	683.49 ^{+0.86} _{-0.86}	507 ⁺⁶⁷⁷ ₋₁₆₁	654 ⁺¹²⁷⁷ ₋₂₁₂	477 ⁺⁵³⁴ ₋₁₃₃	682 ⁺⁷³⁸ ₋₃₀₀
6266*	6.81 ± 0.25	—	—	251 ⁺²³² ₋₉₅	308 ⁺⁴⁵⁹ ₋₉₅	277 ⁺²⁰⁰ ₋₉₂	321 ⁺²⁶⁰ ₋₁₃₂
6267	2.33 ± 1.51	149.34 ^{+0.06} _{-0.06}	134.50 ^{+0.06} _{-0.06}	118 ⁺⁷⁷ ₋₅₃	145 ⁺¹⁴² ₋₄₆	160 ⁺⁷³ ₋₆₉	145 ⁺⁸⁹ ₋₆₄
6269	2.51 ± 1.20	156.61 ^{+0.05} _{-0.05}	142.18 ^{+0.06} _{-0.06}	124 ⁺⁸³ ₋₅₆	153 ⁺¹⁵⁵ ₋₄₉	166 ⁺⁷⁸ ₋₇₁	154 ⁺⁹⁵ ₋₆₇
6270	2.03 ± 0.78	136.76 ^{+0.06} _{-0.06}	121.36 ^{+0.07} _{-0.07}	106 ⁺⁴⁹ ₋₄₉	132 ⁺¹²² ₋₄₃	149 ⁺⁶⁵ ₋₆₇	131 ⁺⁷⁸ ₋₅₉
6271	8.27 ± 3.72	335.45 ^{+0.09} _{-0.09}	346.01 ^{+0.11} _{-0.11}	286 ⁺²⁸³ ₋₁₀₄	353 ⁺⁵⁵⁹ ₋₁₁₀	305 ⁺²⁴⁰ ₋₉₇	369 ⁺³¹⁶ ₋₁₅₃
6272	0.67 ± 0.11	67.55 ^{+0.12} _{-0.12}	53.26 ^{+0.12} _{-0.12}	47 ⁺²⁸ ₋₂₄	66 ⁺³⁶ ₋₂₃	87 ⁺³⁴ ₋₄₈	61 ⁺³⁹ ₋₃₂
6273	3.36 ± 1.37	188.69 ^{+0.04} _{-0.04}	176.73 ^{+0.04} _{-0.04}	153 ⁺¹¹¹ ₋₆₅	187 ⁺²¹⁵ ₋₅₉	193 ⁺¹⁰² ₋₈₁	191 ⁺¹²⁷ ₋₈₁
6274*	2.90 ± 0.13	—	—	138 ⁺⁹⁶ ₋₆₀	169 ⁺¹⁸² ₋₅₃	179 ⁺⁸⁹ ₋₇₄	171 ⁺¹⁰⁹ ₋₇₄
6275	15.10 ± 6.87	492.78 ^{+0.36} _{-0.36}	542.15 ^{+0.45} _{-0.45}	420 ⁺⁵¹¹ ₋₁₃₉	534 ⁺⁹⁸³ ₋₁₁₈	411 ⁺⁴¹³ ₋₁₁₈	558 ⁺⁵⁶² ₋₂₃₉
6278	9.22 [†]	359.58 ^{+0.12} _{-0.12}	375.24 ^{+0.14} _{-0.14}	307 ⁺³¹⁶ ₋₁₁₀	381 ⁺⁶²² ₋₁₁₈	322 ⁺²⁶⁶ ₋₁₀₀	399 ⁺³⁵² ₋₁₆₅

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
6279	1.85 ± 0.40	128.88 ^{+0.07} _{-0.07}	113.24 ^{+0.08} _{-0.08}	99 ⁺⁶² ₋₄₆	124 ⁺¹⁰⁹ ₋₄₀	142 ⁺⁶⁰ ₋₆₅	123 ⁺⁷² ₋₅₆
6280	2.37 ± 0.28	150.98 ^{+0.05} _{-0.05}	136.22 ^{+0.06} _{-0.06}	119 ⁺⁷⁸ ₋₅₄	147 ⁺¹⁴⁵ ₋₄₇	161 ⁺⁷⁴ ₋₇₀	147 ⁺⁹⁰ ₋₆₅
6281	67.50 ± 33.20	1282.57 ^{+4.13} _{-4.12}	1656.53 ^{+6.38} _{-6.35}	974 ⁺¹⁶²⁰ ₋₃₀₇	1314 ⁺²⁷⁹⁸ ₋₄₇₈	812 ⁺¹¹⁸³ ₋₂₄₉	1330 ⁺¹⁷⁸⁸ ₋₆₅₂
6283	0.42 ± 0.29	49.99 ^{+0.14} _{-0.14}	37.47 ^{+0.13} _{-0.13}	34 ⁺²² ₋₁₈	51 ⁺²³ ₋₁₈	70 ⁺³⁰ ₋₄₂	46 ⁺³⁴ ₋₂₆
6284	6.55 [†]	289.03 ^{+0.05} _{-0.05}	290.77 ^{+0.06} _{-0.06}	244 ⁺²²³ ₋₉₃	300 ⁺⁴⁴¹ ₋₉₃	271 ⁺¹⁹³ ₋₉₁	312 ⁺²⁵⁰ ₋₁₂₉
6285	1.27 ± 0.35	101.35 ^{+0.09} _{-0.09}	85.54 ^{+0.10} _{-0.10}	75 ⁺⁴⁴ ₋₃₇	97 ⁺⁷² ₋₃₂	118 ⁺⁴⁶ ₋₅₉	94 ⁺⁵⁴ ₋₄₅
6288	0.83 ± 0.26	77.06 ^{+0.12} _{-0.12}	62.11 ^{+0.12} _{-0.11}	55 ⁺³² ₋₂₈	74 ⁺⁴⁵ ₋₂₆	95 ⁺³⁶ ₋₅₂	70 ⁺⁴² ₋₃₆
6292	44.10 ± 15.00	977.21 ^{+2.26} _{-2.25}	1205.89 ^{+3.31} _{-3.30}	780 ⁺¹²³⁴ ₋₂₄₀	1041 ⁺²¹⁹⁶ ₋₃₆₂	676 ⁺⁹²³ ₋₁₁₇₇	1066 ⁺¹³³⁶ ₋₅₀₅
6293	66.90 ± 1.08	1275.27 ^{+4.08} _{-4.07}	1645.53 ^{+6.29} _{-6.27}	970 ⁺¹⁶¹² ₋₃₀₅	1308 ⁺²⁷⁸⁵ ₋₄₇₅	809 ⁺¹¹⁷⁷ ₋₂₄₈	1324 ⁺¹⁷⁷⁸ ₋₆₄₈
6294	0.82 ± 0.61	76.88 ^{+0.12} _{-0.12}	61.95 ^{+0.12} _{-0.11}	55 ⁺³² ₋₂₈	74 ⁺⁴⁴ ₋₂₅	95 ⁺³⁶ ₋₅₂	70 ⁺⁴² ₋₃₆
6295	1.12 ± 0.43	93.53 ^{+0.10} _{-0.10}	77.88 ^{+0.10} _{-0.10}	69 ⁺⁴⁰ ₋₃₄	89 ⁺⁶² ₋₃₀	111 ⁺⁴² ₋₅₆	86 ⁺⁵⁰ ₋₄₂
6296	0.38 [†]	47.13 ^{+0.14} _{-0.14}	34.98 ^{+0.13} _{-0.13}	31 ⁺²¹ ₋₁₇	48 ⁺²¹ ₋₁₈	67 ⁺³⁰ ₋₄₁	44 ⁺³⁴ ₋₂₅
6298	2.36 [†]	150.57 ^{+0.05} _{-0.05}	135.79 ^{+0.06} _{-0.06}	119 ⁺⁷⁸ ₋₅₄	146 ⁺¹⁴⁴ ₋₄₇	161 ⁺⁷⁴ ₋₇₀	147 ⁺⁹⁰ ₋₆₅
6299	3.50 ± 2.14	193.67 ^{+0.04} _{-0.04}	182.20 ^{+0.04} _{-0.04}	158 ⁺¹¹⁶ ₋₆₇	193 ⁺²²⁴ ₋₆₀	197 ⁺¹⁰⁶ ₋₇₇	197 ⁺¹³² ₋₈₃
6300	0.39 [†]	47.28 ^{+0.14} _{-0.14}	35.12 ^{+0.13} _{-0.13}	32 ⁺²¹ ₋₁₇	49 ⁺²¹ ₋₁₈	67 ⁺³⁰ ₋₄₁	44 ⁺³⁴ ₋₂₅
6301	20.10 ± 5.31	591.57 ^{+0.62} _{-0.62}	671.08 ^{+0.82} _{-0.82}	500 ⁺⁶⁶² ₋₁₅₉	644 ⁺¹²⁵² ₋₂₀₈	472 ⁺⁵²⁴ ₋₁₃₂	672 ⁺⁷²² ₋₂₉₅
6303	3.51 ± 0.30	194.03 ^{+0.04} _{-0.04}	182.59 ^{+0.04} _{-0.04}	158 ⁺¹¹⁶ ₋₆₇	193 ⁺²²⁴ ₋₆₀	197 ⁺¹⁰⁶ ₋₇₇	197 ⁺¹³² ₋₈₃
6304	1.80 ± 0.65	126.65 ^{+0.07} _{-0.07}	110.95 ^{+0.08} _{-0.08}	97 ⁺⁶⁰ ₋₄₆	122 ⁺¹⁰⁶ ₋₄₀	140 ⁺⁵⁹ ₋₆₅	120 ⁺⁷¹ ₋₅₅
6305	1.94 ± 0.84	132.85 ^{+0.07} _{-0.07}	117.33 ^{+0.07} _{-0.07}	103 ⁺⁶⁵ ₋₄₈	128 ⁺¹¹⁵ ₋₄₁	146 ⁺⁶³ ₋₆₆	127 ⁺⁷⁵ ₋₅₈
6306	10.70 ± 2.11	395.45 ^{+0.17} _{-0.17}	419.31 ^{+0.20} _{-0.20}	338 ⁺³⁶⁷ ₋₁₁₈	422 ⁺⁷¹⁸ ₋₁₃₂	347 ⁺³⁰⁵ ₋₁₀₅	442 ⁺⁴⁰⁷ ₋₁₈₅
6307	32.60 ± 4.94	805.68 ^{+1.42} _{-1.42}	962.57 ^{+2.01} _{-2.00}	661 ⁺⁹⁸⁸ ₋₂₀₃	872 ⁺¹⁸⁰¹ ₋₂₉₄	591 ⁺⁷⁵⁴ ₋₁₆₅	900 ⁺¹⁰⁶⁹ ₋₄₁₄
6308	2.16 [†]	142.29 ^{+0.06} _{-0.06}	127.11 ^{+0.07} _{-0.07}	111 ⁺⁷² ₋₅₁	138 ⁺¹³⁰ ₋₄₄	154 ⁺⁶⁸ ₋₆₁	137 ⁺⁸³ ₋₆₁
6309	1.83 ± 0.92	127.99 ^{+0.07} _{-0.07}	112.33 ^{+0.08} _{-0.08}	99 ⁺⁶¹ ₋₄₆	123 ⁺¹⁰⁸ ₋₄₀	142 ⁺⁶⁰ ₋₅₆	122 ⁺⁷² ₋₅₆
6314	36.90 ± 10.40	872.04 ^{+1.72} _{-1.72}	1055.76 ^{+2.48} _{-2.47}	708 ⁺¹⁰⁸⁵ ₋₂₁₇	938 ⁺¹⁹⁵⁹ ₋₃₂₀	625 ⁺⁸²¹ ₋₁₇₇	966 ⁺¹¹⁷³ ₋₄₅₀
6315	1.50 ± 0.25	112.72 ^{+0.08} _{-0.08}	96.84 ^{+0.09} _{-0.09}	85 ⁺⁵¹ ₋₄₁	108 ⁺⁸⁶ ₋₃₅	128 ⁺⁵¹ ₋₆₁	105 ⁺⁶¹ ₋₅₀
6317	1.49 ± 0.80	112.24 ^{+0.08} _{-0.08}	96.36 ^{+0.09} _{-0.09}	85 ⁺⁵¹ ₋₄₁	107 ⁺⁸⁶ ₋₃₅	128 ⁺⁵¹ ₋₆₁	105 ⁺⁶¹ ₋₄₉
6319	2.95 ± 1.38	173.64 ^{+0.04} _{-0.04}	160.38 ^{+0.05} _{-0.05}	140 ⁺⁹⁷ ₋₆₁	171 ⁺¹⁸⁵ ₋₅₄	181 ⁺⁹⁰ ₋₇₄	173 ⁺¹¹¹ ₋₇₅
6320	0.80 ± 0.25	75.26 ^{+0.12} _{-0.12}	60.43 ^{+0.12} _{-0.12}	53 ⁺³¹ ₋₂₇	72 ⁺⁴³ ₋₂₅	94 ⁺³⁶ ₋₅₁	68 ⁺⁴¹ ₋₃₅
6321	2.25 ± 0.34	146.05 ^{+0.06} _{-0.06}	131.04 ^{+0.06} _{-0.06}	115 ⁺⁷⁴ ₋₅₂	142 ⁺¹³⁷ ₋₄₅	157 ⁺⁷¹ ₋₆₉	142 ⁺⁸⁶ ₋₆₃
6322	1.00 ± 0.28	86.89 ^{+0.11} _{-0.11}	71.46 ^{+0.11} _{-0.11}	63 ⁺³⁷ ₋₃₁	83 ⁺⁵⁴ ₋₂₈	103 ⁺⁵⁵ ₋₄₀	79 ⁺⁴⁶ ₋₄₀
6323	3.94 ± 2.33	208.89 ^{+0.03} _{-0.03}	199.02 ^{+0.04} _{-0.04}	172 ⁺¹³¹ ₋₇₁	209 ⁺²⁵⁶ ₋₆₅	209 ⁺¹¹⁸ ₋₈₀	215 ⁺¹⁴⁹ ₋₉₀
6328	1.33 ± 0.40	104.38 ^{+0.09} _{-0.09}	88.53 ^{+0.09} _{-0.09}	78 ⁺⁴⁶ ₋₃₈	100 ⁺⁷⁵ ₋₃₃	121 ⁺⁴⁷ ₋₅₉	97 ⁺⁵⁶ ₋₄₆
6329*	3.51 ± 0.10	—	—	158 ⁺¹¹⁶ ₋₆₇	193 ⁺²²⁵ ₋₆₀	197 ⁺¹⁰⁶ ₋₈₄	197 ⁺¹³² ₋₈₄
6330	3.57 ± 2.91	196.14 ^{+0.04} _{-0.04}	184.91 ^{+0.04} _{-0.04}	160 ⁺¹¹⁸ ₋₆₈	195 ⁺²²⁹ ₋₆₁	199 ⁺¹⁰⁸ ₋₇₈	200 ⁺¹³⁵ ₋₈₅
6331	1.48 [†]	111.76 ^{+0.08} _{-0.08}	95.88 ^{+0.09} _{-0.09}	84 ⁺⁵¹ ₋₄₀	107 ⁺⁸⁵ ₋₃₅	127 ⁺⁵¹ ₋₆₁	104 ⁺⁶⁰ ₋₄₉
6334	3.93 ± 2.40	208.55 ^{+0.03} _{-0.03}	198.65 ^{+0.04} _{-0.04}	171 ⁺¹³¹ ₋₇₁	209 ⁺²⁵⁵ ₋₆₅	209 ⁺¹¹⁸ ₋₈₀	214 ⁺¹⁴⁸ ₋₉₀
6335	1.83 ± 0.32	127.99 ^{+0.07} _{-0.07}	112.33 ^{+0.08} _{-0.08}	99 ⁺⁶¹ ₋₄₆	123 ⁺¹⁰⁸ ₋₄₀	142 ⁺⁶⁰ ₋₅₆	122 ⁺⁷² ₋₅₆
6336*	20.70 ± 0.35	—	—	509 ⁺⁶⁸⁰ ₋₁₆₁	657 ⁺¹²⁸² ₋₂₁₃	478 ⁺⁵³⁶ ₋₁₃₃	684 ⁺⁷⁴¹ ₋₃₀₁
6337	8.67 ± 1.26	345.72 ^{+0.10} _{-0.10}	358.42 ^{+0.12} _{-0.12}	295 ⁺²⁹⁷ ₋₁₀₆	365 ⁺⁵⁸⁵ ₋₁₁₃	313 ⁺²⁵¹ ₋₉₈	382 ⁺³³¹ ₋₁₅₈
6338	53.20 ± 39.60	1101.62 ^{+2.97} _{-2.96}	1387.01 ^{+4.45} _{-4.44}	862 ⁺¹³⁹⁹ ₋₂₆₇	1156 ⁺²⁴⁵⁶ ₋₄₁₀	734 ⁺¹⁰³⁵ ₋₂₁₇	1178 ⁺¹⁵²⁴ ₋₅₆₇
6339	25.90 ± 3.60	695.56 ^{+0.97} _{-0.97}	810.78 ^{+1.33} _{-1.33}	580 ⁺⁸²² ₋₁₈₀	757 ⁺¹⁵²⁶ ₋₂₅₀	531 ⁺⁶³⁸ ₋₁₄₈	786 ⁺⁸⁹² ₋₃₅₃
6341	28.00 ± 4.43	731.08 ^{+1.11} _{-1.11}	859.32 ^{+1.54} _{-1.54}	607 ⁺⁸⁷⁶ ₋₁₈₈	794 ⁺¹⁶¹⁶ ₋₂₆₄	551 ⁺⁶⁷⁶ ₋₁₅₃	823 ⁺⁹⁴⁹ ₋₃₇₃
6342	9.89 ± 9.28	376.06 ^{+0.14} _{-0.14}	395.40 ^{+0.17} _{-0.17}	321 ⁺³³⁹ ₋₁₁₃	400 ⁺⁶⁶⁶ ₋₁₂₅	334 ⁺³⁷⁷ ₋₁₀₂	419 ⁺³⁷⁷ ₋₁₇₄
6343	3.55 [†]	195.44 ^{+0.04} _{-0.04}	184.14 ^{+0.04} _{-0.04}	160 ⁺¹¹⁸ ₋₆₇	194 ⁺²²⁸ ₋₆₁	198 ⁺¹⁰⁷ ₋₇₈	199 ⁺¹³⁴ ₋₈₄
6344	2.33 ± 0.42	149.34 ^{+0.06} _{-0.06}	134.50 ^{+0.06} _{-0.06}	118 ⁺⁷⁷ ₋₅₃	145 ⁺¹⁴² ₋₄₆	160 ⁺⁷³ ₋₆₉	145 ⁺⁸⁹ ₋₆₄
6345	0.80 ± 0.56	75.68 ^{+0.12} _{-0.12}	60.82 ^{+0.12} _{-0.12}	54 ⁺³² ₋₂₇	73 ⁺⁴³ ₋₂₅	94 ⁺³⁶ ₋₅₁	69 ⁺⁴² ₋₃₅
6346	3.52 ± 0.67	194.38 ^{+0.04} _{-0.04}	182.97 ^{+0.04} _{-0.04}	159 ⁺¹¹⁷ ₋₆₇	193 ⁺²²⁶ ₋₆₁	198 ⁺¹⁰⁶ ₋₇₇	197 ⁺¹³³ ₋₈₄
6347	13.20 ± 10.40	452.21 ^{+0.27} _{-0.27}	490.41 ^{+0.34} _{-0.34}	386 ⁺⁴⁵⁰ ₋₁₃₀	488 ⁺⁸⁷² ₋₁₅₄	385 ⁺³⁶⁸ ₋₁₁₂	511 ⁺⁴⁹⁶ ₋₂₁₆
6349	14.30 ± 0.61	475.94 ^{+0.32} _{-0.32}	520.58 ^{+0.40} _{-0.40}	406 ⁺⁴⁸⁵ ₋₁₃₅	515 ⁺⁹³⁷ ₋₁₆₃	400 ⁺³⁹⁴ ₋₁₁₅	539 ⁺⁵³⁴ ₋₂₂₉

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
6351	2.09 ± 0.51	$139.33^{+0.06}_{-0.06}$	$124.03^{+0.07}_{-0.07}$	109^{+69}_{-50}	135^{+126}_{-43}	151^{+66}_{-67}	134^{+80}_{-60}
6353*	1.71 ± 0.10	—	—	94^{+57}_{-44}	118^{+100}_{-38}	137^{+57}_{-64}	116^{+68}_{-53}
6354	62.70 ± 45.20	$1223.53^{+3.74}_{-3.72}$	$1567.84^{+5.72}_{-5.69}$	938^{+1551}_{-294}	1264^{+2691}_{-456}	787^{+1137}_{-239}	1282^{+1703}_{-625}
6355	3.69 ± 1.39	$200.33^{+0.03}_{-0.03}$	$189.52^{+0.04}_{-0.04}$	164^{+122}_{-69}	200^{+238}_{-63}	202^{+111}_{-78}	205^{+139}_{-86}
6361	15.30 ± 10.40	$496.94^{+0.37}_{-0.37}$	$547.50^{+0.47}_{-0.47}$	424^{+517}_{-139}	538^{+995}_{-171}	414^{+418}_{-118}	563^{+568}_{-241}
6366	1.06 ± 0.79	$90.30^{+0.10}_{-0.10}$	$74.75^{+0.11}_{-0.11}$	66^{+39}_{-33}	86^{+58}_{-29}	108^{+41}_{-56}	83^{+48}_{-41}
6368	34.50 ± 3.68	$835.37^{+1.55}_{-1.55}$	$1004.11^{+2.21}_{-2.21}$	682^{+1032}_{-210}	902^{+1873}_{-306}	606^{+785}_{-170}	930^{+1116}_{-430}
6369	1.54 ± 1.07	$114.63^{+0.08}_{-0.08}$	$98.76^{+0.09}_{-0.09}$	87^{+52}_{-41}	110^{+89}_{-36}	130^{+52}_{-62}	107^{+62}_{-50}
6370	3.38^{\dagger}	$189.41^{+0.04}_{-0.04}$	$177.52^{+0.04}_{-0.04}$	154^{+112}_{-66}	188^{+216}_{-59}	194^{+102}_{-77}	192^{+127}_{-82}
6372	5.85 ± 2.90	$268.89^{+0.04}_{-0.04}$	$267.27^{+0.05}_{-0.05}$	226^{+198}_{-88}	277^{+392}_{-86}	256^{+173}_{-88}	288^{+223}_{-119}
6375	6.32 ± 2.04	$282.50^{+0.05}_{-0.05}$	$283.12^{+0.05}_{-0.05}$	238^{+215}_{-91}	292^{+425}_{-90}	266^{+186}_{-90}	304^{+241}_{-126}
6376	7.78 ± 6.08	$322.61^{+0.08}_{-0.08}$	$330.60^{+0.09}_{-0.09}$	274^{+266}_{-101}	338^{+525}_{-105}	290^{+227}_{-95}	353^{+297}_{-146}
6380*	5.19 ± 0.38	—	—	208^{+175}_{-82}	254^{+345}_{-79}	241^{+154}_{-85}	263^{+197}_{-109}
6385	6.51 ± 2.92	$287.90^{+0.05}_{-0.05}$	$289.45^{+0.06}_{-0.06}$	243^{+221}_{-92}	299^{+438}_{-92}	270^{+191}_{-91}	311^{+248}_{-128}
6386	27.50 ± 10.60	$722.71^{+1.08}_{-1.07}$	$847.85^{+1.49}_{-1.48}$	600^{+864}_{-186}	786^{+1595}_{-261}	546^{+667}_{-152}	814^{+936}_{-368}
6388	2.88 ± 0.78	$170.99^{+0.04}_{-0.04}$	$157.54^{+0.05}_{-0.05}$	137^{+95}_{-60}	168^{+181}_{-73}	178^{+152}_{-73}	170^{+109}_{-73}
6389*	4.61 ± 0.19	—	—	192^{+154}_{-78}	234^{+304}_{-73}	227^{+137}_{-83}	241^{+174}_{-100}
6390	43.30 ± 3.16	$965.85^{+2.20}_{-2.19}$	$1189.54^{+3.22}_{-3.21}$	772^{+1218}_{-237}	1030^{+2171}_{-357}	671^{+912}_{-193}	1055^{+1319}_{-499}
6393	0.62^{\dagger}	$64.04^{+0.13}_{-0.13}$	$50.04^{+0.12}_{-0.12}$	44^{+27}_{-23}	63^{+33}_{-22}	83^{+33}_{-47}	58^{+38}_{-31}
6395	39.40 ± 12.00	$909.34^{+1.91}_{-1.90}$	$1108.67^{+2.76}_{-2.75}$	734^{+1139}_{-225}	975^{+2045}_{-335}	643^{+858}_{-183}	1002^{+1232}_{-469}
6396	4.11 ± 0.76	$214.61^{+0.03}_{-0.03}$	$205.39^{+0.04}_{-0.04}$	177^{+137}_{-73}	216^{+268}_{-67}	214^{+123}_{-80}	222^{+155}_{-93}
6397*	3.12 ± 0.15	—	—	145^{+103}_{-63}	178^{+198}_{-56}	186^{+95}_{-77}	181^{+118}_{-77}
6398	66.40 ± 46.80	$1269.18^{+4.04}_{-4.03}$	$1636.35^{+6.22}_{-6.20}$	966^{+1605}_{-304}	1303^{+2774}_{-473}	806^{+1173}_{-247}	1319^{+1769}_{-646}
6399	0.86 ± 0.41	$78.77^{+0.11}_{-0.11}$	$63.73^{+0.11}_{-0.11}$	56^{+33}_{-28}	76^{+46}_{-26}	97^{+37}_{-52}	72^{+43}_{-37}
6400	5.94 ± 0.96	$271.53^{+0.04}_{-0.04}$	$270.33^{+0.05}_{-0.05}$	229^{+201}_{-88}	280^{+398}_{-87}	258^{+175}_{-89}	291^{+226}_{-120}
6401	11.30 ± 3.37	$409.48^{+0.19}_{-0.19}$	$436.73^{+0.23}_{-0.23}$	350^{+387}_{-121}	439^{+756}_{-137}	357^{+320}_{-106}	459^{+429}_{-192}
6404*	2.99 ± 0.11	—	—	141^{+99}_{-61}	172^{+188}_{-54}	182^{+91}_{-74}	175^{+113}_{-75}
6405	3.33 ± 0.89	$187.61^{+0.04}_{-0.04}$	$175.55^{+0.04}_{-0.04}$	152^{+110}_{-65}	186^{+212}_{-58}	192^{+101}_{-76}	189^{+125}_{-81}
6408	7.93 ± 4.25	$326.57^{+0.08}_{-0.08}$	$335.34^{+0.09}_{-0.09}$	278^{+271}_{-102}	343^{+536}_{-106}	299^{+231}_{-96}	358^{+303}_{-148}
6409	0.55 ± 0.39	$59.18^{+0.13}_{-0.13}$	$45.63^{+0.12}_{-0.12}$	41^{+25}_{-21}	58^{+29}_{-21}	79^{+32}_{-45}	54^{+36}_{-29}
6411	3.12 ± 2.61	$179.96^{+0.04}_{-0.04}$	$167.23^{+0.04}_{-0.04}$	145^{+103}_{-63}	178^{+198}_{-56}	186^{+95}_{-75}	181^{+118}_{-77}
6412	12.50 ± 10.40	$436.74^{+0.24}_{-0.24}$	$470.88^{+0.30}_{-0.30}$	373^{+427}_{-127}	470^{+830}_{-148}	375^{+350}_{-110}	492^{+472}_{-207}
6413	1.14 ± 0.37	$94.60^{+0.10}_{-0.10}$	$78.92^{+0.10}_{-0.10}$	70^{+41}_{-34}	90^{+63}_{-30}	112^{+43}_{-43}	87^{+50}_{-43}
6414*	6.18 ± 0.47	—	—	235^{+210}_{-90}	288^{+415}_{-89}	263^{+182}_{-124}	299^{+236}_{-124}
6419	0.44^{\dagger}	$51.72^{+0.14}_{-0.14}$	$38.99^{+0.13}_{-0.13}$	35^{+23}_{-19}	52^{+24}_{-19}	71^{+30}_{-43}	48^{+35}_{-27}
6422	0.70 ± 0.07	$69.46^{+0.12}_{-0.12}$	$55.03^{+0.12}_{-0.12}$	49^{+29}_{-25}	67^{+38}_{-23}	88^{+39}_{-49}	63^{+39}_{-33}
6425	4.96 ± 0.75	$241.99^{+0.04}_{-0.04}$	$236.31^{+0.04}_{-0.04}$	202^{+167}_{-81}	246^{+329}_{-76}	236^{+147}_{-84}	255^{+188}_{-106}
6427	24.60 ± 7.94	$673.06^{+0.89}_{-0.89}$	$780.22^{+1.21}_{-1.21}$	563^{+788}_{-176}	733^{+1467}_{-241}	519^{+614}_{-144}	761^{+855}_{-340}
6435	4.70 ± 3.60	$233.81^{+0.03}_{-0.03}$	$227.01^{+0.04}_{-0.04}$	194^{+158}_{-78}	237^{+310}_{-74}	229^{+140}_{-83}	245^{+178}_{-102}
6436	10.10 ± 1.32	$381.14^{+0.15}_{-0.15}$	$401.65^{+0.18}_{-0.18}$	326^{+346}_{-114}	406^{+679}_{-126}	337^{+289}_{-103}	425^{+385}_{-177}
6437	0.59^{\dagger}	$62.24^{+0.13}_{-0.13}$	$48.41^{+0.12}_{-0.12}$	43^{+26}_{-22}	61^{+32}_{-22}	81^{+32}_{-47}	57^{+37}_{-30}
6439	4.07^{\dagger}	$213.27^{+0.03}_{-0.03}$	$203.90^{+0.04}_{-0.04}$	176^{+136}_{-73}	214^{+265}_{-67}	213^{+122}_{-80}	220^{+154}_{-92}
6440	2.43 ± 0.78	$153.41^{+0.05}_{-0.05}$	$138.79^{+0.06}_{-0.06}$	121^{+80}_{-54}	149^{+149}_{-48}	164^{+76}_{-70}	150^{+92}_{-66}
6443	24.90 ± 7.84	$678.29^{+0.91}_{-0.91}$	$787.31^{+1.24}_{-1.24}$	567^{+796}_{-177}	738^{+1481}_{-243}	522^{+619}_{-145}	767^{+864}_{-343}
6444	1.35 ± 0.91	$105.38^{+0.09}_{-0.09}$	$89.52^{+0.09}_{-0.09}$	79^{+47}_{-38}	101^{+77}_{-33}	121^{+48}_{-60}	98^{+56}_{-47}
6445	23.30 ± 10.30	$650.11^{+0.81}_{-0.81}$	$749.26^{+1.10}_{-1.09}$	545^{+753}_{-171}	708^{+1407}_{-232}	506^{+588}_{-140}	737^{+818}_{-328}
6446	4.25 ± 1.15	$219.25^{+0.03}_{-0.03}$	$210.59^{+0.04}_{-0.04}$	181^{+142}_{-74}	221^{+278}_{-69}	218^{+127}_{-95}	227^{+161}_{-95}
6447	3.39^{\dagger}	$189.76^{+0.04}_{-0.04}$	$177.91^{+0.04}_{-0.04}$	154^{+112}_{-66}	188^{+217}_{-59}	194^{+103}_{-77}	192^{+128}_{-82}
6448	0.91 ± 0.37	$82.14^{+0.11}_{-0.11}$	$66.93^{+0.11}_{-0.11}$	59^{+35}_{-30}	79^{+50}_{-27}	100^{+38}_{-53}	75^{+44}_{-38}

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
6450	1.73 [†]	123.48 ^{+0.07} _{-0.07}	107.72 ^{+0.08} _{-0.08}	95 ⁺⁵⁸ ₋₄₄	119 ⁺¹⁰¹ ₋₃₉	138 ⁺⁵⁷ ₋₆₄	117 ⁺⁶⁸ ₋₅₄
6451	4.03 ± 1.21	211.93 ^{+0.03} _{-0.03}	202.40 ^{+0.04} _{-0.04}	175 ⁺¹³⁴ ₋₇₂	213 ⁺²⁶² ₋₆₆	212 ⁺¹²¹ ₋₈₀	218 ⁺¹⁵² ₋₉₂
6452	3.53 [†]	194.73 ^{+0.04} _{-0.04}	183.36 ^{+0.04} _{-0.04}	159 ⁺¹¹⁷ ₋₆₇	194 ⁺²²⁷ ₋₆₁	198 ⁺¹⁰⁶ ₋₇₇	198 ⁺¹³³ ₋₈₄
6453*	1.71 ± 0.05	—	—	94 ⁺⁵⁷ ₋₄₄	118 ⁺¹⁰⁰ ₋₃₈	137 ⁺⁵⁷ ₋₆₄	116 ⁺⁶⁸ ₋₅₃
6454*	4.85 ± 0.17	—	—	199 ⁺¹⁶³ ₋₈₀	242 ⁺³²¹ ₋₇₅	233 ⁺¹⁴⁴ ₋₈₄	251 ⁺¹⁸⁴ ₋₁₀₄
6462	26.70 ± 11.40	709.21 ^{+1.02} _{-1.02}	829.38 ^{+1.41} _{-1.41}	590 ⁺⁸⁴³ ₋₁₈₃	771 ⁺¹⁵⁶¹ ₋₂₅₅	539 ⁺⁶⁵³ ₋₁₅₀	800 ⁺⁹¹⁴ ₋₃₆₁
6469	2.07 [†]	138.47 ^{+0.06} _{-0.06}	123.14 ^{+0.07} _{-0.07}	108 ⁺⁶⁹ ₋₅₀	134 ⁺¹²⁴ ₋₄₃	151 ⁺⁶⁶ ₋₆₇	133 ⁺⁸⁰ ₋₆₀
6472*	8.86 ± 0.09	—	—	299 ⁺³⁰⁴ ₋₁₀₇	371 ⁺⁵⁹⁸ ₋₁₁₅	316 ⁺²⁵⁶ ₋₉₉	388 ⁺³³⁸ ₋₁₆₁
6476	22.00 ± 0.79	626.70 ^{+0.73} _{-0.73}	717.85 ^{+0.98} _{-0.98}	527 ⁺⁷¹⁷ ₋₁₆₆	683 ⁺¹³⁴⁶ ₋₂₂₂	492 ⁺⁵⁶³ ₋₁₃₇	711 ⁺⁷⁸⁰ ₋₃₁₄
6479	6.09 ± 1.09	275.89 ^{+0.05} _{-0.05}	275.40 ^{+0.05} _{-0.05}	233 ⁺²⁰⁶ ₋₈₉	285 ⁺⁴⁰⁹ ₋₈₉	261 ⁺¹⁸⁰ ₋₁₂₂	296 ⁺²³² ₋₁₂₂
6486	9.20 ± 3.48	359.08 ^{+0.12} _{-0.12}	374.64 ^{+0.14} _{-0.14}	306 ⁺³¹⁵ ₋₁₀₉	380 ⁺⁶²¹ ₋₁₁₈	322 ⁺²⁶⁵ ₋₁₀₀	398 ⁺³⁵¹ ₋₁₆₅
6487	0.69 [†]	68.83 ^{+0.12} _{-0.12}	54.44 ^{+0.12} _{-0.12}	48 ⁺²⁹ ₋₂₅	67 ⁺³⁷ ₋₂₃	88 ⁺³⁴ ₋₄₉	62 ⁺³⁹ ₋₃₃
6488	13.40 ± 5.85	456.58 ^{+0.28} _{-0.28}	495.94 ^{+0.35} _{-0.35}	390 ⁺⁴⁵⁶ ₋₁₃₁	493 ⁺⁸⁸⁴ ₋₁₅₅	389 ⁺³⁷² ₋₁₁₃	516 ⁺⁵⁰³ ₋₂₁₈
6489	1.48 ± 0.12	111.76 ^{+0.08} _{-0.08}	95.88 ^{+0.09} _{-0.09}	84 ⁺⁵¹ ₋₄₀	107 ⁺⁸⁵ ₋₃₅	127 ⁺⁵¹ ₋₆₁	104 ⁺⁶⁰ ₋₄₉
6490	1.12 ± 0.69	93.53 ^{+0.10} _{-0.10}	77.88 ^{+0.10} _{-0.10}	69 ⁺⁴⁰ ₋₃₄	89 ⁺⁶² ₋₃₀	111 ⁺⁴² ₋₅₆	86 ⁺⁵⁰ ₋₄₂
6497	9.73 ± 5.54	372.16 ^{+0.14} _{-0.14}	390.62 ^{+0.16} _{-0.16}	318 ⁺³³⁴ ₋₁₁₂	396 ⁺⁶⁵⁵ ₋₁₂₃	331 ⁺²⁷⁹ ₋₁₀₂	414 ⁺³⁷¹ ₋₁₇₂
6498	0.83 ± 0.27	77.53 ^{+0.11} _{-0.11}	62.56 ^{+0.11} _{-0.11}	55 ⁺³² ₋₂₆	75 ⁺⁴⁵ ₋₂₆	96 ⁺⁵² ₋₃₇	70 ⁺⁴² ₋₃₆
6504	2.08 ± 0.36	138.90 ^{+0.06} _{-0.06}	123.58 ^{+0.07} _{-0.07}	108 ⁺⁶⁹ ₋₅₀	134 ⁺¹²⁵ ₋₄₃	151 ⁺⁶⁶ ₋₆₇	134 ⁺⁸⁰ ₋₆₀
6519	20.80 ± 5.52	604.64 ^{+0.66} _{-0.66}	688.44 ^{+0.88} _{-0.88}	510 ⁺⁶⁸³ ₋₁₆₂	659 ⁺¹²⁸⁷ ₋₂₁₃	479 ⁺⁵³⁸ ₋₁₃₄	686 ⁺⁷⁴⁴ ₋₃₀₂
6520	0.62 ± 0.55	63.97 ^{+0.13} _{-0.13}	49.98 ^{+0.12} _{-0.12}	44 ⁺²⁷ ₋₂₃	63 ⁺³³ ₋₂₂	83 ⁺³³ ₋₄₇	58 ⁺³⁷ ₋₃₁
6521	1.33 ± 0.28	104.38 ^{+0.09} _{-0.09}	88.53 ^{+0.09} _{-0.09}	78 ⁺⁴⁶ ₋₃₈	100 ⁺⁷⁵ ₋₃₃	121 ⁺⁴⁷ ₋₅₉	97 ⁺⁵⁶ ₋₄₆
6522	2.14 ± 0.72	141.45 ^{+0.06} _{-0.06}	126.23 ^{+0.07} _{-0.07}	111 ⁺⁷¹ ₋₆₁	137 ⁺¹²⁹ ₋₄₄	153 ⁺⁶⁸ ₋₆₈	137 ⁺⁸² ₋₆₁
6523	0.72 ± 0.27	70.84 ^{+0.12} _{-0.12}	56.31 ^{+0.12} _{-0.12}	50 ⁺³⁰ ₋₂₅	69 ⁺³⁹ ₋₂₄	90 ⁺³⁵ ₋₅₀	64 ⁺⁴⁰ ₋₃₄
6525*	3.63 ± 0.21	—	—	162 ⁺¹²⁰ ₋₆₈	198 ⁺²³⁴ ₋₆₂	201 ⁺¹⁰⁹ ₋₇₈	202 ⁺¹³⁷ ₋₈₅
6526*	1.39 ± 0.02	—	—	81 ⁺⁴⁸ ₋₃₉	103 ⁺⁷⁹ ₋₃₄	123 ⁺⁴⁹ ₋₆₀	100 ⁺⁵⁸ ₋₄₇
6527	0.87 ± 0.18	79.42 ^{+0.11} _{-0.11}	64.34 ^{+0.11} _{-0.11}	57 ⁺³³ ₋₂₉	76 ⁺⁴⁷ ₋₂₆	98 ⁺³⁷ ₋₅₂	72 ⁺⁴³ ₋₃₇
6528	2.99 ± 0.35	175.14 ^{+0.04} _{-0.04}	162.00 ^{+0.05} _{-0.05}	141 ⁺⁹⁹ ₋₆₁	172 ⁺¹⁸⁸ ₋₅₄	182 ⁺⁹¹ ₋₇₄	175 ⁺¹¹³ ₋₇₅
6529	2.18 ± 1.41	143.13 ^{+0.06} _{-0.06}	127.99 ^{+0.07} _{-0.07}	112 ⁺⁷² ₋₅₁	139 ⁺¹³² ₋₄₄	153 ⁺⁶⁹ ₋₆₈	138 ⁺⁸⁴ ₋₆₂
6531	1.89 ± 0.86	130.65 ^{+0.07} _{-0.07}	115.06 ^{+0.07} _{-0.07}	101 ⁺⁶³ ₋₄₇	126 ⁺¹¹² ₋₄₁	144 ⁺⁶⁶ ₋₅₇	125 ⁺⁷⁴ ₋₅₇
6533	4.31 ± 0.32	221.22 ^{+0.03} _{-0.03}	212.80 ^{+0.04} _{-0.04}	183 ⁺¹⁴⁴ ₋₇₅	223 ⁺²⁸² ₋₆₉	219 ⁺¹²⁹ ₋₈₁	230 ⁺¹⁶³ ₋₉₆
6534	1.03 ± 0.82	88.66 ^{+0.10} _{-0.10}	73.16 ^{+0.11} _{-0.11}	64 ⁺³² ₋₃₂	85 ⁺⁵⁷ ₋₂₉	106 ⁺⁴⁰ ₋₅₅	81 ⁺⁴⁷ ₋₄₀
6535	20.20 ± 0.98	593.44 ^{+0.63} _{-0.63}	673.57 ^{+0.83} _{-0.83}	501 ⁺⁶⁶⁵ ₋₁₅₉	646 ⁺¹²⁵⁷ ₋₂₀₉	473 ⁺⁵²⁶ ₋₁₃₂	674 ⁺⁷²⁵ ₋₂₉₆
6536	5.51 ± 3.34	258.80 ^{+0.04} _{-0.04}	255.59 ^{+0.04} _{-0.04}	217 ⁺¹⁸⁶ ₋₈₅	265 ⁺³⁶⁸ ₋₈₂	248 ⁺¹⁶³ ₋₈₇	275 ⁺²⁰⁹ ₋₁₁₄
6538	2.82 ± 1.02	168.71 ^{+0.05} _{-0.05}	155.08 ^{+0.05} _{-0.05}	135 ⁺⁹³ ₋₅₉	166 ⁺¹⁷⁶ ₋₅₂	176 ⁺⁸⁶ ₋₇₃	167 ⁺¹⁰⁷ ₋₇₂
6539*	101.00 ± 5.59	—	—	1189 ⁺²⁰⁰⁶ ₋₃₉₁	1610 ⁺³³⁹⁷ ₋₆₁₂	957 ⁺¹⁴³⁹ ₋₃₁₇	1613 ⁺²³¹⁰ ₋₈₀₈
6540	8.44 [†]	339.84 ^{+0.10} _{-0.10}	351.30 ^{+0.11} _{-0.11}	290 ⁺²⁸⁹ ₋₁₀₅	358 ⁺⁵⁷⁰ ₋₁₁₁	308 ⁺²⁴⁵ ₋₉₇	375 ⁺³²³ ₋₁₅₅
6542	17.80 ± 10.90	547.38 ^{+0.49} _{-0.49}	612.93 ^{+0.64} _{-0.64}	465 ⁺⁵⁹⁴ ₋₁₅₀	595 ⁺¹¹³² ₋₁₉₁	445 ⁺⁴⁷⁴ ₋₁₂₅	622 ⁺⁶⁵⁰ ₋₂₇₀
6543	15.80 [†]	507.25 ^{+0.39} _{-0.39}	560.79 ^{+0.50} _{-0.50}	432 ⁺⁵³³ ₋₁₄₂	550 ⁺¹⁰²³ ₋₁₇₅	420 ⁺⁴²⁹ ₋₁₂₀	575 ⁺⁵⁸⁵ ₋₂₄₇
6544	8.14 ± 1.17	332.07 ^{+0.09} _{-0.09}	341.94 ^{+0.10} _{-0.10}	283 ⁺²⁷⁸ ₋₁₀₃	349 ⁺⁵⁵⁰ ₋₁₀₈	303 ⁺²³⁷ ₋₉₆	365 ⁺³¹¹ ₋₁₅₁
6545	1.07 ± 0.67	90.84 ^{+0.10} _{-0.10}	75.27 ^{+0.11} _{-0.11}	66 ⁺³⁹ ₋₃₃	87 ⁺⁵⁹ ₋₂₉	108 ⁺⁴¹ ₋₅₆	83 ⁺⁴⁸ ₋₄₁
6546	0.63 ± 0.26	65.03 ^{+0.13} _{-0.13}	50.94 ^{+0.12} _{-0.12}	45 ⁺²⁷ ₋₂₃	63 ⁺³⁴ ₋₂₂	84 ⁺³⁸ ₋₄₈	59 ⁺³⁸ ₋₃₁
6547	16.90 [†]	529.54 ^{+0.45} _{-0.45}	589.66 ^{+0.58} _{-0.58}	450 ⁺⁵⁶⁷ ₋₁₄₆	575 ⁺¹⁰⁸⁴ ₋₁₈₄	434 ⁺⁴⁵⁴ ₋₁₂₃	601 ⁺⁶²¹ ₋₂₅₉
6550	2.80 ± 0.59	167.94 ^{+0.05} _{-0.05}	154.26 ^{+0.05} _{-0.05}	135 ⁺⁹² ₋₅₉	165 ⁺¹⁷⁵ ₋₅₂	176 ⁺⁷³ ₋₇₃	167 ⁺¹⁰⁶ ₋₇₂
6551	1.04 ± 0.89	89.21 ^{+0.10} _{-0.10}	73.69 ^{+0.11} _{-0.11}	65 ⁺³⁸ ₋₃₂	85 ⁺⁵⁷ ₋₂₉	107 ⁺⁴¹ ₋₅₅	82 ⁺⁴⁸ ₋₄₀
6552	0.79 ± 0.71	74.84 ^{+0.12} _{-0.12}	60.03 ^{+0.12} _{-0.12}	53 ⁺³¹ ₋₂₇	72 ⁺⁴³ ₋₂₅	93 ⁺³⁶ ₋₅₁	68 ⁺⁴¹ ₋₃₅
6554	0.47 ± 0.17	53.86 ^{+0.13} _{-0.13}	40.88 ^{+0.13} _{-0.13}	36 ⁺²³ ₋₁₉	54 ⁺²⁵ ₋₁₉	73 ⁺³¹ ₋₄₃	49 ⁺³⁵ ₋₂₇
6557	1.18 ± 0.38	96.70 ^{+0.10} _{-0.10}	80.97 ^{+0.10} _{-0.10}	71 ⁺⁴² ₋₃₅	92 ⁺⁶⁶ ₋₃₁	114 ⁺⁴⁴ ₋₅₇	89 ⁺⁵¹ ₋₄₃
6560*	2.58 ± 0.12	—	—	127 ⁺⁸⁵ ₋₅₆	156 ⁺¹⁶⁰ ₋₄₉	169 ⁺⁸⁰ ₋₇₁	157 ⁺⁹⁸ ₋₆₉
6562	1.71 [†]	122.56 ^{+0.07} _{-0.07}	106.79 ^{+0.08} _{-0.08}	94 ⁺⁵⁷ ₋₄₄	118 ⁺¹⁰⁰ ₋₃₈	137 ⁺⁵⁷ ₋₆₄	116 ⁺⁶⁸ ₋₅₃

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
6564	2.05 ± 0.46	137.62 ^{+0.06} _{-0.06}	122.25 ^{+0.07} _{-0.07}	107 ⁺⁶⁸ ₋₄₉	133 ⁺¹²³ ₋₄₃	150 ⁺⁶⁵ ₋₆₇	132 ⁺⁷⁹ ₋₅₉
6566	3.61 ± 0.81	197.54 ^{+0.04} _{-0.04}	186.45 ^{+0.04} _{-0.04}	161 ⁺¹²⁰ ₋₆₈	197 ⁺²³² ₋₆₂	200 ⁺¹⁰⁹ ₋₇₈	201 ⁺¹³⁶ ₋₈₅
6569	1.37 [†]	106.38 ^{+0.09} _{-0.09}	90.51 ^{+0.09} _{-0.09}	80 ⁺⁴⁷ ₋₃₈	102 ⁺⁷⁸ ₋₃₄	122 ⁺⁴⁸ ₋₆₀	99 ⁺⁵⁷ ₋₄₇
6570*	3.11 ± 0.21	—	—	145 ⁺¹⁰³ ₋₆₃	177 ⁺¹⁹⁷ ₋₅₆	185 ⁺⁹⁵ ₋₇₅	180 ⁺¹¹⁷ ₋₇₇
6571	2.25 [†]	146.05 ^{+0.06} _{-0.06}	131.04 ^{+0.06} _{-0.06}	115 ⁺⁷⁴ ₋₅₂	142 ⁺¹³⁷ ₋₄₅	157 ⁺⁷¹ ₋₆₉	142 ⁺⁸⁶ ₋₆₃
6573	6.37 ± 3.94	283.93 ^{+0.05} _{-0.05}	284.79 ^{+0.06} _{-0.06}	240 ⁺²¹⁶ ₋₉₁	294 ⁺⁴²⁸ ₋₉₁	268 ⁺¹⁸⁷ ₋₉₀	306 ⁺²⁴³ ₋₁₂₆
6576*	10.30 ± 0.17	—	—	330 ⁺³⁵³ ₋₁₁₅	411 ⁺⁶⁹² ₋₁₂₈	341 ⁺²⁹⁴ ₋₁₀₃	431 ⁺³⁹² ₋₁₈₀
6577	2.19 ± 1.03	143.55 ^{+0.06} _{-0.06}	128.43 ^{+0.06} _{-0.06}	113 ⁺⁷² ₋₅₁	139 ⁺¹³³ ₋₄₅	155 ⁺⁶⁹ ₋₆₈	139 ⁺⁸⁴ ₋₆₂
6578	1.67 ± 0.57	120.72 ^{+0.08} _{-0.08}	104.92 ^{+0.08} _{-0.08}	92 ⁺⁵⁶ ₋₄₄	116 ⁺⁹⁷ ₋₃₈	135 ⁺⁵⁶ ₋₆₃	114 ⁺⁶⁶ ₋₅₃
6579	12.60 ± 2.42	438.97 ^{+0.24} _{-0.24}	473.68 ^{+0.30} _{-0.30}	375 ⁺⁴³⁰ ₋₁₂₇	472 ⁺⁸³⁶ ₋₁₄₈	376 ⁺³⁵³ ₋₁₁₀	495 ⁺⁴⁷⁵ ₋₂₀₉
6580	6.80 ± 1.53	296.02 ^{+0.06} _{-0.06}	299.01 ^{+0.06} _{-0.06}	251 ⁺²³¹ ₋₉₄	308 ⁺⁴⁵⁸ ₋₉₅	277 ⁺²⁰⁰ ₋₉₂	321 ⁺²⁶⁰ ₋₁₃₂
6581*	2.94 ± 0.16	—	—	139 ⁺⁹⁷ ₋₆₁	170 ⁺¹⁸⁵ ₋₅₄	180 ⁺⁹⁰ ₋₇₄	173 ⁺¹¹¹ ₋₇₄
6582	0.74 ± 0.39	71.59 ^{+0.12} _{-0.12}	57.00 ^{+0.12} _{-0.12}	50 ⁺³⁰ ₋₂₆	69 ⁺⁴⁰ ₋₂₄	90 ⁺³⁵ ₋₅₀	65 ⁺⁴⁰ ₋₃₄
6583	1.29 ± 0.53	102.37 ^{+0.09} _{-0.09}	86.54 ^{+0.10} _{-0.10}	76 ⁺⁴⁵ ₋₃₇	98 ⁺⁷³ ₋₃₃	119 ⁺⁴⁶ ₋₅₉	95 ⁺⁵⁵ ₋₄₅
6585	1.63 ± 0.55	118.87 ^{+0.08} _{-0.08}	103.04 ^{+0.08} _{-0.08}	91 ⁺⁵⁵ ₋₄₃	114 ⁺⁹⁵ ₋₃₇	134 ⁺⁵⁵ ₋₆₃	112 ⁺⁶⁵ ₋₅₂
6586	0.84 [†]	77.89 ^{+0.11} _{-0.11}	62.90 ^{+0.11} _{-0.11}	56 ⁺³³ ₋₂₅	75 ⁺⁴⁵ ₋₂₆	96 ⁺³⁷ ₋₅₂	71 ⁺⁴² ₋₃₆
6587*	7.59 ± 0.06	—	—	270 ⁺²⁵⁹ ₋₁₀₀	333 ⁺⁵¹² ₋₁₀₃	292 ⁺²²¹ ₋₉₅	347 ⁺²⁹⁰ ₋₁₄₃
6589	1.70 ± 0.81	122.10 ^{+0.08} _{-0.08}	106.32 ^{+0.08} _{-0.08}	93 ⁺⁵⁷ ₋₄₄	117 ⁺⁹⁹ ₋₃₈	136 ⁺⁵⁶ ₋₆₄	115 ⁺⁶⁷ ₋₅₃
6590	4.98 ± 0.84	242.61 ^{+0.04} _{-0.04}	237.02 ^{+0.04} _{-0.04}	202 ⁺¹⁶⁷ ₋₈₁	247 ⁺³³⁰ ₋₇₇	236 ⁺¹⁴⁸ ₋₈₅	255 ⁺¹⁸⁹ ₋₁₀₆
6591	11.20 ± 3.09	407.16 ^{+0.19} _{-0.19}	433.84 ^{+0.23} _{-0.23}	348 ⁺³⁸⁴ ₋₁₂₀	436 ⁺⁷⁴⁹ ₋₁₃₆	355 ⁺³¹⁷ ₋₁₀₆	457 ⁺⁴²⁵ ₋₁₉₁
6592	1.87 ± 0.51	129.77 ^{+0.07} _{-0.07}	114.15 ^{+0.07} _{-0.07}	100 ⁺⁶² ₋₄₇	125 ⁺¹¹¹ ₋₄₀	143 ⁺⁶¹ ₋₆₅	124 ⁺⁷³ ₋₅₆
6593*	4.72 ± 0.10	—	—	195 ⁺¹⁵⁸ ₋₇₉	238 ⁺³¹² ₋₇₄	230 ⁺¹⁴¹ ₋₈₃	246 ⁺¹⁷⁹ ₋₁₀₂
6598	1.96 ± 0.41	133.73 ^{+0.07} _{-0.07}	118.23 ^{+0.07} _{-0.07}	104 ⁺⁶⁵ ₋₄₈	129 ⁺¹¹⁷ ₋₄₂	147 ⁺⁶³ ₋₅₈	128 ⁺⁷⁶ ₋₅₈
6599	8.76 ± 2.11	348.01 ^{+0.11} _{-0.11}	361.19 ^{+0.12} _{-0.12}	297 ⁺³⁰⁰ ₋₁₀₇	368 ⁺⁵⁹¹ ₋₁₁₄	314 ⁺²⁵³ ₋₉₈	385 ⁺³³⁵ ₋₁₅₉
6600	2.69 ± 0.85	163.70 ^{+0.05} _{-0.05}	149.72 ^{+0.05} _{-0.05}	131 ⁺⁸⁹ ₋₅₈	160 ⁺¹⁶⁷ ₋₅₁	172 ⁺⁸³ ₋₇₂	162 ⁺¹⁰² ₋₇₀
6601	2.31 ± 1.35	148.52 ^{+0.06} _{-0.06}	133.64 ^{+0.06} _{-0.06}	117 ⁺⁷⁶ ₋₅₃	144 ⁺¹⁴¹ ₋₄₆	159 ⁺⁷² ₋₆₉	144 ⁺⁸⁸ ₋₆₄
6602	12.70 ± 1.55	441.20 ^{+0.25} _{-0.25}	476.48 ^{+0.31} _{-0.31}	377 ⁺⁴³³ ₋₁₂₈	475 ⁺⁸⁴² ₋₁₄₉	378 ⁺³⁵⁵ ₋₁₁₁	497 ⁺⁴⁷⁹ ₋₂₁₀
6605	2.32 ± 0.25	148.93 ^{+0.06} _{-0.06}	134.07 ^{+0.06} _{-0.06}	117 ⁺⁷⁷ ₋₅₃	145 ⁺¹⁴¹ ₋₄₆	160 ⁺⁷³ ₋₆₉	145 ⁺⁸⁹ ₋₆₄
6606	10.40 ± 1.20	388.33 ^{+0.16} _{-0.16}	410.51 ^{+0.19} _{-0.19}	332 ⁺³⁵⁶ ₋₁₁₆	414 ⁺⁶⁹⁹ ₋₁₂₉	342 ⁺²⁹⁷ ₋₁₀₄	434 ⁺³⁹⁶ ₋₁₈₁
6610	1.18 ± 0.28	96.70 ^{+0.10} _{-0.10}	80.97 ^{+0.10} _{-0.10}	71 ⁺⁴² ₋₃₅	92 ⁺⁶⁶ ₋₃₁	114 ⁺⁴⁴ ₋₅₇	89 ⁺⁵¹ ₋₄₃
6611	2.43 ± 1.03	153.41 ^{+0.05} _{-0.05}	138.79 ^{+0.06} _{-0.06}	121 ⁺⁸⁰ ₋₅₄	149 ⁺¹⁴⁹ ₋₄₈	164 ⁺⁷⁶ ₋₇₀	150 ⁺⁹² ₋₆₆
6613	1.89 [†]	130.65 ^{+0.07} _{-0.07}	115.06 ^{+0.07} _{-0.07}	101 ⁺⁶³ ₋₄₇	126 ⁺¹¹² ₋₄₁	144 ⁺⁶¹ ₋₆₆	125 ⁺⁷⁴ ₋₅₇
6615*	10.10 ± 0.33	—	—	326 ⁺³⁴⁶ ₋₁₁₄	406 ⁺⁶⁷⁹ ₋₁₂₆	337 ⁺²⁸⁹ ₋₁₀₃	425 ⁺³⁸⁵ ₋₁₇₇
6616	5.10 ± 2.79	246.33 ^{+0.04} _{-0.04}	241.27 ^{+0.04} _{-0.04}	206 ⁺¹⁷² ₋₈₂	251 ⁺³³⁹ ₋₇₈	239 ⁺¹⁵¹ ₋₈₅	260 ⁺¹⁹⁴ ₋₁₀₈
6619	2.98 ± 0.65	174.76 ^{+0.04} _{-0.04}	161.60 ^{+0.05} _{-0.05}	141 ⁺⁹⁸ ₋₆₁	172 ⁺¹⁸⁸ ₋₅₄	181 ⁺⁹¹ ₋₇₄	174 ⁺¹¹² ₋₇₅
6620	1.18 ± 0.68	96.70 ^{+0.10} _{-0.10}	80.97 ^{+0.10} _{-0.10}	71 ⁺⁴² ₋₃₅	92 ⁺⁶⁶ ₋₃₁	114 ⁺⁴⁴ ₋₅₇	89 ⁺⁵¹ ₋₄₃
6621	2.99 ± 0.34	175.14 ^{+0.04} _{-0.04}	162.00 ^{+0.05} _{-0.05}	141 ⁺⁹⁹ ₋₆₁	172 ⁺¹⁸⁸ ₋₅₄	182 ⁺⁹¹ ₋₇₄	175 ⁺¹¹³ ₋₇₅
6622	1.59 ± 0.45	117.00 ^{+0.08} _{-0.08}	101.14 ^{+0.08} _{-0.08}	89 ⁺⁵⁴ ₋₄₂	112 ⁺⁹² ₋₃₇	132 ⁺⁵⁴ ₋₆₂	110 ⁺⁶⁴ ₋₅₁
6625	0.71 ± 0.14	69.78 ^{+0.12} _{-0.12}	55.32 ^{+0.12} _{-0.12}	49 ⁺²⁹ ₋₂₅	68 ⁺³⁸ ₋₂₄	89 ⁺³⁴ ₋₄₉	63 ⁺³⁹ ₋₃₃
6629*	8.21 ± 0.23	—	—	284 ⁺²⁸¹ ₋₁₀₄	351 ⁺⁵⁵⁵ ₋₁₀₉	304 ⁺²³⁸ ₋₉₇	367 ⁺³¹⁴ ₋₁₅₂
6630*	3.56 ± 0.09	—	—	160 ⁺¹¹⁸ ₋₆₈	195 ⁺²²⁹ ₋₆₁	199 ⁺¹⁰⁷ ₋₇₈	199 ⁺¹³⁴ ₋₈₄
6631	3.92 ± 1.81	208.22 ^{+0.03} _{-0.03}	198.27 ^{+0.04} _{-0.04}	171 ⁺¹³⁰ ₋₇₁	209 ⁺²⁵⁴ ₋₆₅	209 ⁺¹¹⁸ ₋₈₀	214 ⁺¹⁴⁸ ₋₉₀
6632	0.47 [†]	53.42 ^{+0.14} _{-0.13}	40.49 ^{+0.13} _{-0.13}	36 ⁺²³ ₋₁₉	54 ⁺²⁵ ₋₁₉	73 ⁺³¹ ₋₄₃	49 ⁺³⁵ ₋₂₇
6634	2.43 ± 1.70	153.41 ^{+0.05} _{-0.05}	138.79 ^{+0.06} _{-0.06}	121 ⁺⁸⁰ ₋₅₄	149 ⁺¹⁴⁹ ₋₄₈	164 ⁺⁷⁶ ₋₇₀	150 ⁺⁹² ₋₆₆
6635	1.84 ± 0.18	128.44 ^{+0.07} _{-0.07}	112.78 ^{+0.08} _{-0.08}	99 ⁺⁶¹ ₋₄₆	124 ⁺¹⁰⁹ ₋₄₀	142 ⁺⁶⁰ ₋₆₅	122 ⁺⁷² ₋₅₆
6638	35.80 ± 5.30	855.35 ^{+1.65} _{-1.64}	1032.20 ^{+2.35} _{-2.35}	696 ⁺¹⁰⁶¹ ₋₂₁₄	922 ⁺¹⁹²⁰ ₋₃₁₄	616 ⁺⁸⁰⁵ ₋₁₇₄	949 ⁺¹¹⁴⁷ ₋₄₄₁
6640	31.20 ± 3.90	783.41 ^{+1.32} _{-1.32}	931.56 ^{+1.86} _{-1.86}	645 ⁺⁹⁵⁵ ₋₁₉₉	849 ⁺¹⁷⁴⁷ ₋₂₈₅	579 ⁺⁷³¹ ₋₁₆₂	877 ⁺¹⁰³³ ₋₄₀₂
6641	4.02 ± 1.39	211.59 ^{+0.03} _{-0.03}	202.03 ^{+0.04} _{-0.04}	174 ⁺¹³⁴ ₋₇₂	212 ⁺²⁶² ₋₈₀	212 ⁺¹²⁰ ₋₉₂	218 ⁺¹⁵² ₋₉₂
6642*	7.26 ± 0.41	—	—	262 ⁺²⁴⁸ ₋₉₈	322 ⁺⁴⁰⁰ ₋₁₀₀	286 ⁺²¹² ₋₉₃	336 ⁺²⁷⁷ ₋₁₃₉

Continued on next page

Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
6643	7.61 ± 4.69	318.09 ^{+0.08} _{-0.08}	325.20 ^{+0.09} _{-0.09}	270 ⁺²⁶⁰ ₋₁₀₀	333 ⁺⁵¹⁴ ₋₁₀₃	293 ⁺²²² ₋₉₅	348 ⁺²⁹¹ ₋₁₄₄
6645	12.40 ± 10.80	434.51 ^{+0.24} _{-0.24}	468.06 ^{+0.29} _{-0.29}	371 ⁺⁴²⁴ ₋₁₂₆	467 ⁺⁸²⁴ ₋₁₄₇	373 ⁺³⁴⁸ ₋₁₁₀	489 ⁺⁴⁶⁸ ₋₂₀₆
6648	5.92 ± 1.33	270.94 ^{+0.04} _{-0.04}	269.65 ^{+0.05} _{-0.05}	228 ⁺²⁰⁰ ₋₈₈	279 ⁺³⁹⁷ ₋₈₆	258 ⁺¹⁷⁵ ₋₈₈	290 ⁺²²⁵ ₋₁₂₀
6649	0.69 ± 0.56	68.39 ^{+0.12} _{-0.12}	54.03 ^{+0.12} _{-0.12}	48 ⁺²⁹ ₋₂₅	66 ⁺³⁷ ₋₂₃	87 ⁺³⁴ ₋₄₉	62 ⁺³⁹ ₋₃₃
6655	7.18 ± 0.90	306.49 ^{+0.07} _{-0.07}	311.39 ^{+0.07} _{-0.07}	260 ⁺²⁴⁵ ₋₉₇	320 ⁺⁴⁸⁴ ₋₉₉	284 ⁺²¹⁰ ₋₉₃	334 ⁺²⁷⁴ ₋₁₃₈
6657	1.57 ± 0.31	116.05 ^{+0.08} _{-0.08}	100.19 ^{+0.09} _{-0.09}	88 ⁺⁵³ ₋₄₂	111 ⁺⁹¹ ₋₃₆	131 ⁺⁵³ ₋₆₂	109 ⁺⁶³ ₋₅₁
6658	1.59 [†]	117.00 ^{+0.08} _{-0.08}	101.14 ^{+0.08} _{-0.08}	89 ⁺⁵⁴ ₋₄₂	112 ⁺⁹² ₋₃₇	132 ⁺⁵⁴ ₋₆₂	110 ⁺⁶⁴ ₋₅₁
6659	8.15 ± 2.35	332.33 ^{+0.09} _{-0.09}	342.26 ^{+0.10} _{-0.10}	283 ⁺²⁷⁹ ₋₁₀₃	350 ⁺⁵⁵¹ ₋₁₀₈	303 ⁺²³⁷ ₋₉₆	365 ⁺³¹² ₋₁₅₁
6662	6.18 ± 3.16	278.49 ^{+0.05} _{-0.05}	278.43 ^{+0.05} _{-0.05}	235 ⁺²¹⁰ ₋₉₀	288 ⁺⁴¹⁵ ₋₈₉	263 ⁺¹⁸² ₋₁₂₄	299 ⁺²³⁶ ₋₁₂₄
6665*	6.05 ± 0.08	—	—	231 ⁺²⁰⁵ ₋₈₉	283 ⁺⁴⁰⁶ ₋₈₈	261 ⁺¹⁷⁸ ₋₈₉	295 ⁺²³¹ ₋₁₂₂
6666	1.98 ± 1.00	134.60 ^{+0.07} _{-0.07}	119.13 ^{+0.07} _{-0.07}	105 ⁺⁶⁶ ₋₄₈	130 ⁺¹¹⁸ ₋₄₂	147 ⁺⁷⁷ ₋₆₆	129 ⁺⁷⁷ ₋₅₈
6668	14.40 ± 0.69	478.06 ^{+0.32} _{-0.32}	523.29 ^{+0.41} _{-0.41}	408 ⁺⁴⁸⁹ ₋₁₃₅	517 ⁺⁹⁴³ ₋₁₆₄	402 ⁺³⁹⁶ ₋₁₁₆	541 ⁺⁵³⁸ ₋₂₃₀
6670	41.80 ± 5.04	944.34 ^{+2.09} _{-2.08}	1158.66 ^{+3.04} _{-3.03}	758 ⁺¹¹⁸⁸ ₋₂₃₃	1009 ⁺²¹²⁴ ₋₃₄₉	660 ⁺⁸⁹² ₋₁₈₉	1035 ⁺¹²⁸⁶ ₋₄₈₈
6671	18.30 ± 3.45	557.15 ^{+0.52} _{-0.52}	625.73 ^{+0.68} _{-0.68}	472 ⁺⁶⁰⁹ ₋₁₅₂	606 ⁺¹¹⁵⁹ ₋₁₉₅	451 ⁺⁴⁸⁵ ₋₁₂₇	633 ⁺⁶⁶⁶ ₋₂₇₅
6672	1.73 ± 0.16	123.48 ^{+0.07} _{-0.07}	107.72 ^{+0.08} _{-0.08}	95 ⁺⁵⁸ ₋₄₄	119 ⁺¹⁰¹ ₋₃₉	138 ⁺⁵⁷ ₋₆₄	117 ⁺⁶⁸ ₋₅₄
6673	1.38 ± 0.77	106.87 ^{+0.09} _{-0.09}	91.00 ^{+0.09} _{-0.09}	80 ⁺⁴⁸ ₋₃₉	102 ⁺⁷⁹ ₋₃₄	123 ⁺⁴⁸ ₋₆₀	99 ⁺⁵⁷ ₋₄₇
6674	2.05 ± 0.66	137.62 ^{+0.06} _{-0.06}	122.25 ^{+0.07} _{-0.07}	107 ⁺⁶⁸ ₋₄₉	133 ⁺¹²³ ₋₄₃	150 ⁺⁶⁵ ₋₆₇	132 ⁺⁷⁹ ₋₅₉
6676	4.60 ± 1.13	230.62 ^{+0.03} _{-0.03}	223.39 ^{+0.04} _{-0.04}	192 ⁺¹⁵⁴ ₋₇₇	233 ⁺³⁰³ ₋₇₃	227 ⁺¹³⁷ ₋₈₃	241 ⁺¹⁷⁴ ₋₁₀₀
6678	0.91 [†]	82.09 ^{+0.11} _{-0.11}	66.87 ^{+0.11} _{-0.11}	59 ⁺³⁵ ₋₃₀	79 ⁺⁵⁰ ₋₂₇	100 ⁺³⁸ ₋₅₃	75 ⁺⁴⁴ ₋₃₈
6679	19.30 ± 1.80	576.41 ^{+0.58} _{-0.58}	651.06 ^{+0.76} _{-0.76}	488 ⁺⁶³⁹ ₋₁₅₆	627 ⁺¹²¹¹ ₋₂₀₂	463 ⁺⁵⁰⁷ ₋₁₂₉	655 ⁺⁶⁹⁸ ₋₂₈₆
6682	8.18 [†]	333.11 ^{+0.09} _{-0.09}	343.20 ^{+0.10} _{-0.10}	284 ⁺²⁸⁰ ₋₁₀₃	350 ⁺⁵⁵³ ₋₁₀₉	304 ⁺²³⁸ ₋₉₇	366 ⁺³¹³ ₋₁₅₁
6683	2.19 ± 0.30	143.55 ^{+0.06} _{-0.06}	128.43 ^{+0.06} _{-0.06}	113 ⁺⁷² ₋₅₁	139 ⁺¹³³ ₋₄₅	153 ⁺⁶⁹ ₋₆₂	139 ⁺⁸⁴ ₋₆₃
6686	2.17 [†]	142.71 ^{+0.06} _{-0.06}	127.55 ^{+0.07} _{-0.07}	112 ⁺⁷² ₋₅₁	138 ⁺¹³¹ ₋₄₄	154 ⁺⁶⁹ ₋₆₂	138 ⁺⁸³ ₋₆₂
6689	13.20 ± 7.20	452.21 ^{+0.27} _{-0.27}	490.41 ^{+0.34} _{-0.34}	386 ⁺⁴⁵⁰ ₋₁₃₀	488 ⁺⁸⁷² ₋₁₅₄	385 ⁺³⁶⁸ ₋₁₁₂	511 ⁺⁴⁹⁶ ₋₂₁₆
6690	17.20 ± 5.25	535.52 ^{+0.46} _{-0.46}	597.45 ^{+0.60} _{-0.60}	455 ⁺⁵⁷⁶ ₋₁₄₇	582 ⁺¹¹⁰⁰ ₋₁₈₆	438 ⁺⁴⁶¹ ₋₁₂₄	608 ⁺⁶³¹ ₋₂₆₃
6693	8.09 ± 3.06	330.76 ^{+0.09} _{-0.09}	340.38 ^{+0.10} _{-0.10}	281 ⁺²⁷⁷ ₋₁₀₃	348 ⁺⁵⁴⁶ ₋₁₀₈	302 ⁺²³⁵ ₋₉₆	363 ⁺³⁰⁹ ₋₁₅₀
6694*	18.30 ± 0.73	—	—	472 ⁺⁶⁰⁹ ₋₁₅₂	606 ⁺¹¹⁵⁹ ₋₁₉₅	451 ⁺⁴⁸⁵ ₋₁₂₇	633 ⁺⁶⁶⁶ ₋₂₇₅
6695	6.33 ± 3.71	282.79 ^{+0.05} _{-0.05}	283.46 ^{+0.05} _{-0.05}	239 ⁺²¹⁵ ₋₉₁	293 ⁺⁴²⁵ ₋₉₁	267 ⁺¹⁸⁶ ₋₉₀	305 ⁺²⁴¹ ₋₁₂₆
6697	9.32 ± 2.39	362.06 ^{+0.12} _{-0.12}	378.28 ^{+0.14} _{-0.14}	309 ⁺³¹⁹ ₋₁₁₀	384 ⁺⁶²⁸ ₋₁₁₉	324 ⁺²⁶⁸ ₋₁₀₀	402 ⁺³⁵⁶ ₋₁₆₇
6698	40.90 ± 6.78	931.30 ^{+2.02} _{-2.01}	1140.00 ^{+2.93} _{-2.93}	749 ⁺¹⁰⁷⁰ ₋₂₃₀	997 ⁺²⁰⁹⁵ ₋₃₄₄	654 ⁺¹⁸⁷ ₋₁₈₇	1023 ⁺¹²⁶⁶ ₋₄₈₁
6700	59.10 ± 30.40	1178.18 ^{+3.44} _{-3.43}	1500.20 ^{+5.23} _{-5.21}	910 ⁺¹⁴⁹⁶ ₋₂₈₄	1225 ⁺²⁶⁰⁶ ₋₄₃₉	768 ⁺¹¹⁰⁰ ₋₂₃₁	1244 ⁺¹⁶³⁷ ₋₆₀₄
6702	9.22 ± 1.44	359.58 ^{+0.12} _{-0.12}	375.24 ^{+0.14} _{-0.14}	307 ⁺³¹⁶ ₋₁₁₀	381 ⁺⁶²² ₋₁₁₈	322 ⁺²⁶⁶ ₋₁₀₀	399 ⁺³⁵² ₋₁₆₅
6707	1.42 ± 0.38	108.84 ^{+0.09} _{-0.09}	92.96 ^{+0.09} _{-0.09}	82 ⁺⁴⁹ ₋₃₉	104 ⁺⁸¹ ₋₃₄	125 ⁺⁴⁹ ₋₆₀	101 ⁺⁵⁹ ₋₄₈
6708	8.56 ± 1.42	342.91 ^{+0.10} _{-0.10}	355.02 ^{+0.12} _{-0.12}	292 ⁺²⁹³ ₋₁₀₆	362 ⁺⁵⁷⁸ ₋₁₁₂	311 ⁺²⁴⁸ ₋₉₈	378 ⁺³²⁷ ₋₁₅₇
6710	8.47 ± 6.47	340.61 ^{+0.10} _{-0.10}	352.23 ^{+0.11} _{-0.11}	290 ⁺²⁹⁰ ₋₁₀₅	359 ⁺⁵⁷² ₋₁₁₁	309 ⁺²⁴⁶ ₋₉₈	376 ⁺³²⁴ ₋₁₅₅
6715	16.20 ± 2.66	515.42 ^{+0.41} _{-0.41}	571.35 ^{+0.53} _{-0.53}	439 ⁺⁵⁴⁵ ₋₁₄₃	559 ⁺¹⁰⁴⁵ ₋₁₇₈	425 ⁺⁴³⁸ ₋₁₂₁	585 ⁺⁵⁹⁸ ₋₂₅₁
6716	0.60 ± 0.40	63.04 ^{+0.13} _{-0.13}	49.14 ^{+0.12} _{-0.12}	44 ⁺²⁷ ₋₂₃	62 ⁺³² ₋₂₂	82 ⁺³³ ₋₄₇	57 ⁺³⁷ ₋₃₁
6718	1.20 [†]	97.75 ^{+0.10} _{-0.10}	81.99 ^{+0.10} _{-0.10}	72 ⁺⁴² ₋₃₅	93 ⁺⁶⁷ ₋₃₁	115 ⁺⁴⁴ ₋₅₈	90 ⁺⁵² ₋₄₄
6720	0.72 ± 0.43	70.53 ^{+0.12} _{-0.12}	56.02 ^{+0.12} _{-0.12}	50 ⁺²⁹ ₋₂₅	68 ⁺³⁹ ₋₂₄	89 ⁺³⁴ ₋₄₉	64 ⁺⁴⁰ ₋₃₃
6745	1.16 ± 0.33	95.65 ^{+0.10} _{-0.10}	79.95 ^{+0.10} _{-0.10}	70 ⁺⁴¹ ₋₃₅	91 ⁺⁶⁵ ₋₃₁	113 ⁺⁴³ ₋₅₇	88 ⁺⁵¹ ₋₄₃
6753	35.60 ± 7.94	852.29 ^{+1.63} _{-1.63}	1027.89 ^{+2.33} _{-2.33}	694 ⁺¹⁰⁵⁷ ₋₂₁₃	919 ⁺¹⁹¹³ ₋₃₁₂	615 ⁺⁸⁰² ₋₁₇₃	946 ⁺¹¹⁴² ₋₄₃₉
6757	9.65 ± 2.73	370.20 ^{+0.13} _{-0.13}	388.22 ^{+0.16} _{-0.16}	316 ⁺³³¹ ₋₁₁₂	393 ⁺⁶⁵⁰ ₋₁₂₂	330 ⁺²⁷⁷ ₋₁₇₁	412 ⁺³⁶⁸ ₋₁₇₁
6762	2.32 ± 0.77	148.93 ^{+0.06} _{-0.06}	134.07 ^{+0.06} _{-0.06}	117 ⁺⁵³ ₋₅₃	145 ⁺¹⁴¹ ₋₄₆	160 ⁺⁷³ ₋₆₉	145 ⁺⁸⁹ ₋₆₄
6763*	4.25 ± 0.53	—	—	181 ⁺¹⁴² ₋₇₄	221 ⁺²⁷⁸ ₋₆₉	218 ⁺¹²⁷ ₋₈₁	227 ⁺¹⁶¹ ₋₉₅
6764	2.64 ± 0.33	161.75 ^{+0.05} _{-0.05}	147.64 ^{+0.05} _{-0.05}	129 ⁺⁸⁷ ₋₅₇	158 ⁺¹⁶⁴ ₋₅₀	171 ⁺⁸¹ ₋₇₂	159 ⁺¹⁰⁰ ₋₇₀
6767	1.42 ± 0.70	108.84 ^{+0.09} _{-0.09}	92.96 ^{+0.09} _{-0.09}	82 ⁺⁴⁹ ₋₃₉	104 ⁺⁸¹ ₋₃₄	125 ⁺⁴⁹ ₋₆₀	101 ⁺⁵⁹ ₋₄₈
6774	2.32 ± 2.01	148.93 ^{+0.06} _{-0.06}	134.07 ^{+0.06} _{-0.06}	117 ⁺⁷⁷ ₋₅₃	145 ⁺¹⁴¹ ₋₄₆	160 ⁺⁷³ ₋₆₉	145 ⁺⁸⁹ ₋₆₄
6782	14.70 ± 5.55	484.40 ^{+0.34} _{-0.34}	531.40 ^{+0.43} _{-0.43}	413 ⁺⁴⁹⁸ ₋₁₃₇	524 ⁺⁹⁶⁰ ₋₁₆₆	406 ⁺⁴⁰⁴ ₋₁₁₆	549 ⁺⁵⁴⁸ ₋₂₃₄
6786	2.70 [†]	164.09 ^{+0.05} _{-0.05}	150.13 ^{+0.05} _{-0.05}	131 ⁺⁸⁹ ₋₅₈	161 ⁺¹⁶⁸ ₋₅₁	173 ⁺⁸³ ₋₇₂	162 ⁺¹⁰² ₋₇₁

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
6787	23.40 ± 8.28	651.89 ^{+0.82} _{-0.81}	751.66 ^{+1.10} _{-1.10}	547 ⁺⁷⁵⁵ ₋₁₇₁	710 ⁺¹⁴¹² ₋₂₃₂	507 ⁺⁵⁹⁰ ₋₁₄₁	738 ⁺⁸²¹ ₋₃₂₉
6788	45.40 ± 3.29	995.52 ^{+2.36} _{-2.35}	1232.31 ^{+3.47} _{-3.46}	792 ⁺¹²⁵⁹ ₋₂₄₄	1058 ⁺²²³⁶ ₋₃₆₉	685 ⁺⁹⁴⁰ ₋₁₉₈	1083 ⁺¹³⁶⁴ ₋₅₁₄
6796	1.51 [†]	113.20 ^{+0.08} _{-0.08}	97.32 ^{+0.09} _{-0.09}	86 ⁺⁵¹ ₋₄₁	108 ⁺⁸⁷ ₋₃₆	128 ⁺⁵² ₋₅₂	106 ⁺⁶¹ ₋₅₀
6800	8.01 ± 2.53	328.67 ^{+0.09} _{-0.09}	337.86 ^{+0.10} _{-0.10}	280 ⁺²⁷⁴ ₋₁₀₂	345 ⁺⁵⁴¹ ₋₁₀₇	300 ⁺²³³ ₋₉₆	361 ⁺³⁰⁶ ₋₁₄₉
6802	3.20 ± 0.88	182.90 ^{+0.04} _{-0.04}	170.42 ^{+0.04} _{-0.04}	148 ⁺¹⁰⁶ ₋₆₄	181 ⁺²⁰³ ₋₅₇	188 ⁺⁹⁷ ₋₇₅	184 ⁺¹²¹ ₋₇₉
6814	2.83 ± 0.34	169.09 ^{+0.04} _{-0.04}	155.49 ^{+0.05} _{-0.05}	136 ⁺⁹³ ₋₅₉	166 ⁺¹⁷⁷ ₋₅₂	177 ⁺⁸⁷ ₋₇₃	168 ⁺¹⁰⁷ ₋₇₃
6816	1.84 ± 0.25	128.44 ^{+0.07} _{-0.07}	112.78 ^{+0.08} _{-0.08}	99 ⁺⁶¹ ₋₄₆	124 ⁺¹⁰⁹ ₋₄₀	142 ⁺⁶⁰ ₋₆₅	122 ⁺⁷² ₋₅₆
6817	10.70 ± 1.47	395.45 ^{+0.17} _{-0.17}	419.31 ^{+0.20} _{-0.20}	338 ⁺³⁶⁷ ₋₁₁₈	422 ⁺⁷¹⁸ ₋₁₃₂	347 ⁺³⁰⁵ ₋₁₀₅	442 ⁺⁴⁰⁷ ₋₁₈₅
6824	37.60 ± 3.43	882.57 ^{+1.78} _{-1.77}	1070.67 ^{+2.55} _{-2.55}	715 ⁺¹¹⁰⁰ ₋₂₂₀	949 ⁺¹⁹⁸⁴ ₋₃₂₄	630 ⁺⁸³² ₋₁₇₈	976 ⁺¹¹⁹⁰ ₋₄₅₅
6830	1.06 ± 0.55	90.30 ^{+0.10} _{-0.10}	74.75 ^{+0.11} _{-0.11}	66 ⁺³⁹ ₋₃₃	86 ⁺⁵¹ ₋₂₉	108 ⁺⁴⁸ ₋₅₆	83 ⁺⁴⁸ ₋₄₁
6831	2.41 ± 1.56	152.60 ^{+0.05} _{-0.05}	137.93 ^{+0.06} _{-0.06}	121 ⁺⁸⁰ ₋₅₄	148 ⁺¹⁴⁸ ₋₄₇	163 ⁺⁷⁵ ₋₇₀	149 ⁺⁹² ₋₆₆
6853	2.97 ± 1.34	174.39 ^{+0.04} _{-0.04}	161.19 ^{+0.05} _{-0.05}	140 ⁺⁹⁸ ₋₆₁	172 ⁺¹⁸⁷ ₋₅₄	181 ⁺⁹¹ ₋₇₄	174 ⁺¹¹² ₋₇₅
6866	3.05 [†]	177.37 ^{+0.04} _{-0.04}	164.42 ^{+0.05} _{-0.05}	143 ⁺¹⁰¹ ₋₆₂	175 ⁺¹⁹³ ₋₅₅	184 ⁺⁹³ ₋₇₅	177 ⁺¹¹⁵ ₋₇₆
6867	0.92 [†]	82.37 ^{+0.11} _{-0.11}	67.14 ^{+0.11} _{-0.11}	59 ⁺³⁵ ₋₃₀	79 ⁺⁵⁰ ₋₂₇	100 ⁺³⁸ ₋₅₃	75 ⁺⁴⁴ ₋₃₈
6870	6.42 ± 3.11	285.35 ^{+0.05} _{-0.05}	286.46 ^{+0.06} _{-0.06}	241 ⁺²¹⁸ ₋₉₂	296 ⁺⁴³² ₋₉₁	269 ⁺¹⁸⁹ ₋₉₀	308 ⁺²⁴⁵ ₋₁₂₇
6877	1.48 ± 0.18	111.76 ^{+0.08} _{-0.08}	95.88 ^{+0.09} _{-0.09}	84 ⁺⁵¹ ₋₄₀	107 ⁺⁸⁵ ₋₃₅	127 ⁺⁵¹ ₋₄₉	104 ⁺⁶⁰ ₋₄₉
6880	2.82 ± 0.75	168.71 ^{+0.05} _{-0.05}	155.08 ^{+0.05} _{-0.05}	135 ⁺⁹³ ₋₅₉	166 ⁺¹⁷⁶ ₋₅₂	176 ⁺⁸⁶ ₋₇₃	167 ⁺¹⁰⁷ ₋₇₂
6882	2.03 ± 0.62	136.76 ^{+0.06} _{-0.06}	121.36 ^{+0.07} _{-0.07}	106 ⁺⁶⁷ ₋₄₉	132 ⁺¹²² ₋₄₃	149 ⁺⁶⁵ ₋₆₇	131 ⁺⁷⁸ ₋₅₉
6884	0.63 [†]	64.50 ^{+0.13} _{-0.13}	50.46 ^{+0.12} _{-0.12}	45 ⁺²⁷ ₋₂₃	63 ⁺³³ ₋₂₂	84 ⁺³³ ₋₄₇	58 ⁺³⁸ ₋₃₁
6886	5.49 ± 1.80	258.20 ^{+0.04} _{-0.04}	254.90 ^{+0.04} _{-0.04}	217 ⁺¹⁸⁵ ₋₈₅	265 ⁺³⁶⁶ ₋₈₂	248 ⁺¹⁶³ ₋₈₇	274 ⁺²⁰⁹ ₋₁₁₄
6891*	6.36 ± 0.47	—	—	239 ⁺²¹⁶ ₋₉₁	294 ⁺⁴²⁷ ₋₉₁	267 ⁺¹⁸⁷ ₋₉₀	306 ⁺²⁴³ ₋₁₂₆
6892*	5.76 ± 0.52	—	—	224 ⁺¹⁹⁵ ₋₈₇	274 ⁺³⁸⁵ ₋₈₅	254 ⁺¹⁷⁰ ₋₈₈	284 ⁺²¹⁹ ₋₁₁₇
6903	1.57 ± 0.73	116.05 ^{+0.08} _{-0.08}	100.19 ^{+0.09} _{-0.09}	88 ⁺⁵³ ₋₄₂	111 ⁺⁹¹ ₋₃₆	131 ⁺⁵³ ₋₅₁	109 ⁺⁶³ ₋₅₁
6904*	67.10 ± 1.07	—	—	971 ⁺¹⁶¹⁵ ₋₃₀₆	1310 ⁺²⁷⁹⁰ ₋₄₇₆	810 ⁺¹¹⁷⁹ ₋₂₄₉	1326 ⁺¹⁷⁸¹ ₋₆₅₀
6911	0.63 [†]	64.76 ^{+0.13} _{-0.13}	50.70 ^{+0.12} _{-0.12}	45 ⁺²⁷ ₋₂₃	63 ⁺³⁴ ₋₂₂	84 ⁺³³ ₋₄₇	59 ⁺³⁸ ₋₃₁
6914	1.45 ± 0.94	110.31 ^{+0.08} _{-0.08}	94.42 ^{+0.09} _{-0.09}	83 ⁺⁵⁰ ₋₄₀	105 ⁺⁸³ ₋₃₅	126 ⁺⁵⁰ ₋₆₁	103 ⁺⁵⁹ ₋₄₉
6916	9.66 ± 2.35	370.45 ^{+0.13} _{-0.13}	388.52 ^{+0.16} _{-0.16}	316 ⁺³³¹ ₋₁₁₂	394 ⁺⁶⁵¹ ₋₁₂₂	330 ⁺²⁷⁷ ₋₁₀₁	412 ⁺³⁶⁸ ₋₁₇₁
6917	3.32 ± 0.68	187.25 ^{+0.04} _{-0.04}	175.16 ^{+0.04} _{-0.04}	152 ⁺¹¹⁰ ₋₆₅	186 ⁺²¹² ₋₅₈	192 ⁺¹⁰¹ ₋₇₆	189 ⁺¹²⁵ ₋₈₁
6927	1.35 ± 0.55	105.38 ^{+0.09} _{-0.09}	89.52 ^{+0.09} _{-0.09}	79 ⁺⁴⁷ ₋₃₈	101 ⁺⁷⁷ ₋₃₃	121 ⁺⁴⁸ ₋₆₀	98 ⁺⁵⁶ ₋₄₇
6930	1.22 ± 0.30	98.78 ^{+0.10} _{-0.10}	83.01 ^{+0.10} _{-0.10}	73 ⁺⁴³ ₋₃₆	94 ⁺⁶⁵ ₋₃₂	116 ⁺⁵³ ₋₄₄	91 ⁺⁵³ ₋₄₄
6931	29.40 ± 6.71	754.23 ^{+1.20} _{-1.20}	891.17 ^{+1.68} _{-1.67}	624 ⁺⁹¹¹ ₋₁₉₃	819 ⁺¹⁶⁷⁵ ₋₂₇₃	563 ⁺⁷⁰¹ ₋₁₅₇	847 ⁺⁹⁸⁶ ₋₃₈₆
6935	3.55 ± 0.68	195.44 ^{+0.04} _{-0.04}	184.14 ^{+0.04} _{-0.04}	160 ⁺¹¹⁸ ₋₆₇	194 ⁺²²⁸ ₋₆₁	198 ⁺¹⁰⁷ ₋₇₈	199 ⁺¹³⁴ ₋₈₄
6938	2.14 ± 0.62	141.45 ^{+0.06} _{-0.06}	126.23 ^{+0.07} _{-0.07}	111 ⁺⁷¹ ₋₅₁	137 ⁺¹²⁹ ₋₄₄	153 ⁺⁶⁸ ₋₆₈	137 ⁺⁸² ₋₆₁
6939	0.78 ± 0.57	73.93 ^{+0.12} _{-0.12}	59.18 ^{+0.12} _{-0.12}	52 ⁺³¹ ₋₂₇	71 ⁺⁴² ₋₂₅	93 ⁺³⁵ ₋₅₁	67 ⁺⁴¹ ₋₃₅
6943	29.90 ± 14.20	762.39 ^{+1.23} _{-1.23}	902.45 ^{+1.73} _{-1.72}	630 ⁺⁹²⁴ ₋₁₉₄	827 ⁺¹⁶⁹⁵ ₋₂₇₆	568 ⁺⁷⁰⁹ ₋₁₅₈	856 ⁺¹⁰⁰⁰ ₋₃₉₀
6944	9.01 ± 0.17	354.32 ^{+0.11} _{-0.11}	368.85 ^{+0.13} _{-0.13}	302 ⁺³⁰⁹ ₋₁₀₈	375 ⁺⁶⁰⁸ ₋₁₁₆	319 ⁺²⁶⁰ ₋₉₉	392 ⁺³⁴⁴ ₋₁₆₃
6950	5.86 ± 2.10	269.19 ^{+0.04} _{-0.04}	267.61 ^{+0.05} _{-0.05}	226 ⁺¹⁹⁸ ₋₈₈	277 ⁺³⁹² ₋₈₆	256 ⁺¹⁷³ ₋₈₈	288 ⁺²²³ ₋₁₁₉
6953	0.93 ± 0.33	82.89 ^{+0.11} _{-0.11}	67.63 ^{+0.11} _{-0.11}	60 ⁺³⁵ ₋₃₀	79 ⁺⁵⁰ ₋₂₇	101 ⁺³⁸ ₋₅₃	75 ⁺⁴⁵ ₋₃₈
6963*	4.10 ± 0.08	—	—	177 ⁺¹³⁷ ₋₇₃	215 ⁺²⁶⁷ ₋₆₇	214 ⁺¹²³ ₋₈₀	221 ⁺¹⁵⁵ ₋₉₃
6985*	7.27 ± 0.08	—	—	262 ⁺²⁴⁸ ₋₉₈	323 ⁺⁴⁹¹ ₋₁₀₀	286 ⁺²¹³ ₋₉₃	337 ⁺²⁷⁸ ₋₁₃₉
6987	7.30 ± 2.28	309.75 ^{+0.07} _{-0.07}	315.26 ^{+0.08} _{-0.08}	263 ⁺²⁴⁹ ₋₉₈	324 ⁺⁴⁹³ ₋₁₀₀	287 ⁺²¹³ ₋₉₄	338 ⁺²⁷⁹ ₋₁₃₉
6989	0.75 ± 0.38	72.27 ^{+0.12} _{-0.12}	57.63 ^{+0.12} _{-0.12}	51 ⁺³⁰ ₋₂₆	70 ⁺⁴⁰ ₋₂₄	91 ⁺³⁵ ₋₅₀	66 ⁺⁴⁰ ₋₃₄
7000	1.13 ± 0.53	94.06 ^{+0.10} _{-0.10}	78.40 ^{+0.10} _{-0.10}	69 ⁺⁴⁰ ₋₃₄	90 ⁺⁶³ ₋₃₀	111 ⁺⁴³ ₋₅₇	86 ⁺⁵⁰ ₋₄₂
7009	58.10 ± 9.10	1165.41 ^{+3.36} _{-3.35}	1481.22 ^{+5.09} _{-5.08}	902 ⁺¹⁴⁸⁰ ₋₂₈₁	1213 ⁺²⁵⁸² ₋₄₃₄	762 ⁺¹⁰⁸⁹ ₋₂₂₈	1233 ⁺¹⁶¹⁸ ₋₅₉₈
7012*	4.63 ± 0.12	—	—	192 ⁺¹⁵⁵ ₋₇₈	235 ⁺³⁰⁵ ₋₇₃	227 ⁺¹³⁸ ₋₈₃	242 ⁺¹⁷⁵ ₋₁₀₁
7028*	7.03 ± 0.29	—	—	256 ⁺²⁴⁰ ₋₉₆	315 ⁺⁴⁷⁴ ₋₉₈	281 ⁺²⁰⁶ ₋₉₃	329 ⁺²⁶⁹ ₋₁₃₆
7030	1.82 ± 0.97	127.54 ^{+0.07} _{-0.07}	111.87 ^{+0.08} _{-0.08}	98 ⁺⁶¹ ₋₄₆	123 ⁺¹⁰⁷ ₋₄₀	141 ⁺⁵⁹ ₋₅₅	121 ⁺⁷¹ ₋₅₅
7060	8.69 ± 6.84	346.23 ^{+0.10} _{-0.10}	359.03 ^{+0.12} _{-0.12}	295 ⁺²⁹⁸ ₋₁₀₆	366 ⁺⁵⁸⁷ ₋₁₁₃	313 ⁺²⁵¹ ₋₉₈	382 ⁺³³² ₋₁₅₈
7063	36.80 ± 7.36	870.53 ^{+1.72} _{-1.71}	1053.63 ^{+2.46} _{-2.46}	707 ⁺¹⁰⁸³ ₋₂₁₇	937 ⁺¹⁹⁵⁶ ₋₃₂₀	624 ⁺⁸²⁰ ₋₁₇₆	964 ⁺¹¹⁷¹ ₋₄₄₉

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
7064	10.10 ± 1.65	381.14 ^{+0.15} _{-0.15}	401.65 ^{+0.18} _{-0.18}	326 ⁺³⁴⁶ ₋₁₁₄	406 ⁺⁶⁷⁹ ₋₁₂₆	337 ⁺²⁸⁹ ₋₁₀₃	425 ⁺³⁸⁵ ₋₁₇₇
7078	4.17 ± 4.09	216.60 ^{+0.03} _{-0.03}	207.63 ^{+0.04} _{-0.04}	179 ⁺¹³⁹ ₋₇₄	218 ⁺²⁷² ₋₆₈	216 ⁺¹²⁵ ₋₈₁	224 ⁺¹⁵⁷ ₋₉₄
7087	4.89 ± 0.59	239.80 ^{+0.03} _{-0.03}	233.82 ^{+0.04} _{-0.04}	200 ⁺¹⁶⁴ ₋₈₀	244 ⁺³²⁴ ₋₇₆	234 ⁺¹⁴⁵ ₋₈₄	252 ⁺¹⁸⁵ ₋₁₀₅
7102	12.00 ± 5.18	425.50 ^{+0.22} _{-0.22}	456.75 ^{+0.27} _{-0.27}	364 ⁺⁴¹⁰ ₋₁₂₄	457 ⁺⁷⁹⁹ ₋₁₄₃	367 ⁺³³⁸ ₋₁₀₉	479 ⁺⁴⁵⁴ ₋₂₀₁
7106	47.90 ± 13.30	1030.20 ^{+2.55} _{-2.54}	1282.58 ^{+3.78} _{-3.77}	815 ⁺¹³⁰⁵ ₋₂₅₁	1091 ⁺²³¹⁰ ₋₃₈₂	701 ⁺⁹⁷² ₋₂₀₄	1114 ⁺¹⁴¹⁷ ₋₅₃₁
7108	4.47 ± 1.15	226.43 ^{+0.03} _{-0.03}	218.67 ^{+0.04} _{-0.04}	188 ⁺¹⁴⁹ ₋₇₆	229 ⁺²⁹⁴ ₋₇₁	223 ⁺¹³³ ₋₉₈	236 ⁺¹⁶⁹ ₋₉₈
7110	3.99 ± 1.46	210.58 ^{+0.03} _{-0.03}	200.90 ^{+0.04} _{-0.04}	173 ⁺¹³³ ₋₇₂	211 ⁺²⁵⁹ ₋₆₆	211 ⁺¹²⁰ ₋₈₀	217 ⁺¹⁵¹ ₋₉₁
7111	0.54 ± 0.45	58.62 ^{+0.13} _{-0.13}	45.13 ^{+0.12} _{-0.12}	40 ⁺²⁵ ₋₂₁	58 ⁺²⁹ ₋₂₁	78 ⁺³² ₋₄₅	53 ⁺³⁶ ₋₂₉
7113*	7.95 ± 0.03	—	—	278 ⁺²⁷² ₋₁₀₂	344 ⁺⁵³⁷ ₋₁₀₆	299 ⁺²³¹ ₋₉₆	359 ⁺³⁰⁴ ₋₁₄₈
7116	0.35 [†]	44.57 ^{+0.14} _{-0.14}	32.78 ^{+0.13} _{-0.13}	30 ⁺²⁰ ₋₁₆	46 ⁺¹⁹ ₋₁₇	64 ⁺³⁰ ₋₄₀	42 ⁺³⁴ ₋₂₄
7130	0.63 [†]	64.44 ^{+0.13} _{-0.13}	50.40 ^{+0.12} _{-0.12}	45 ⁺²⁷ ₋₂₃	63 ⁺³³ ₋₂₂	84 ⁺³³ ₋₄₇	58 ⁺³⁸ ₋₃₁
7133	9.58 ± 0.98	368.48 ^{+0.13} _{-0.13}	386.12 ^{+0.15} _{-0.15}	315 ⁺³²⁸ ₋₁₁₂	391 ⁺⁶⁴⁶ ₋₁₂₂	329 ⁺²⁷⁵ ₋₁₀₁	410 ⁺³⁶⁵ ₋₁₇₀
7142	19.10 ± 1.27	572.59 ^{+0.56} _{-0.56}	646.02 ^{+0.74} _{-0.74}	485 ⁺⁶³³ ₋₁₅₅	623 ⁺¹²⁰¹ ₋₂₀₁	460 ⁺⁵⁰³ ₋₁₂₉	650 ⁺⁶⁹¹ ₋₂₈₄
7147	1.28 ± 0.40	101.86 ^{+0.09} _{-0.09}	86.04 ^{+0.10} _{-0.10}	76 ⁺⁴⁵ ₋₃₇	97 ⁺⁷² ₋₃₂	118 ⁺⁵⁹ ₋₅₉	94 ⁺⁵⁴ ₋₄₅
7148	37.20 ± 15.40	876.56 ^{+1.75} _{-1.74}	1062.16 ^{+2.51} _{-2.50}	711 ⁺¹⁰⁹² ₋₂₁₈	943 ⁺¹⁹⁷⁰ ₋₃₂₂	627 ⁺¹¹⁸⁰ ₋₁₇₇	970 ⁺¹¹⁸⁰ ₋₄₅₂
7159	80.70 ± 60.40	1437.58 ^{+5.25} _{-5.23}	1892.60 ^{+8.27} _{-8.24}	1065 ⁺¹⁷⁹¹ ₋₃₄₁	1441 ⁺³⁰⁶¹ ₋₅₃₄	874 ⁺¹²⁹⁶ ₋₂₇₇	1451 ⁺²⁰⁰⁷ ₋₇₁₉
7164	0.78 [†]	73.99 ^{+0.12} _{-0.12}	59.23 ^{+0.12} _{-0.12}	52 ⁺³¹ ₋₂₇	71 ⁺⁴² ₋₂₅	93 ⁺³⁵ ₋₅₁	67 ⁺⁴¹ ₋₃₅
7167	1.00 ± 0.88	87.00 ^{+0.11} _{-0.11}	71.57 ^{+0.11} _{-0.11}	63 ⁺³⁷ ₋₃₁	83 ⁺⁵⁵ ₋₂₈	105 ⁺⁴⁰ ₋₅₅	79 ⁺⁴⁶ ₋₄₀
7170*	21.90 ± 0.33	—	—	526 ⁺⁷¹⁴ ₋₁₆₆	681 ⁺¹³⁴¹ ₋₂₂₁	491 ⁺⁵⁶¹ ₋₁₃₇	709 ⁺⁷⁷⁷ ₋₃₁₃
7172	5.01 ± 0.35	243.54 ^{+0.04} _{-0.04}	238.08 ^{+0.04} _{-0.04}	203 ⁺¹⁶⁸ ₋₈₁	248 ⁺³³² ₋₇₇	237 ⁺¹⁴⁹ ₋₈₅	257 ⁺¹⁹⁰ ₋₁₀₆
7173	53.40 ± 9.20	1104.27 ^{+2.98} _{-2.98}	1390.89 ^{+4.48} _{-4.46}	863 ⁺¹⁴⁰³ ₋₂₆₇	1159 ⁺²⁴⁶² ₋₄₁₁	733 ⁺¹⁰³⁷ ₋₂₁₇	1180 ⁺¹⁵²⁸ ₋₅₆₈
7178	1.02 ± 0.68	88.11 ^{+0.11} _{-0.11}	72.63 ^{+0.11} _{-0.11}	64 ⁺³⁷ ₋₃₂	84 ⁺⁵⁶ ₋₂₉	106 ⁺⁴⁰ ₋₅₅	81 ⁺⁴⁷ ₋₄₀
7183	0.95 [†]	84.48 ^{+0.11} _{-0.11}	69.15 ^{+0.11} _{-0.11}	61 ⁺³⁶ ₋₃₁	81 ⁺⁵² ₋₂₈	102 ⁺³⁹ ₋₅₄	77 ⁺³⁹ ₋₃₉
7185	0.73 ± 0.07	71.28 ^{+0.12} _{-0.12}	56.71 ^{+0.12} _{-0.12}	50 ⁺³⁰ ₋₂₆	69 ⁺³⁹ ₋₂₄	90 ⁺³⁵ ₋₅₀	65 ⁺⁴⁰ ₋₃₄
7187	5.88 ± 2.65	269.77 ^{+0.04} _{-0.04}	268.29 ^{+0.05} _{-0.05}	227 ⁺¹⁹⁹ ₋₈₈	278 ⁺³⁹⁴ ₋₈₆	257 ⁺¹⁷⁴ ₋₈₈	289 ⁺²²⁴ ₋₁₁₉
7191	5.72 ± 3.95	265.06 ^{+0.04} _{-0.04}	262.82 ^{+0.05} _{-0.05}	223 ⁺¹⁹³ ₋₈₇	272 ⁺³⁸² ₋₈₄	253 ⁺¹⁶⁹ ₋₈₈	283 ⁺²¹⁸ ₋₁₁₇
7206	4.18 ± 1.10	216.93 ^{+0.03} _{-0.03}	208.00 ^{+0.04} _{-0.04}	179 ⁺¹³⁹ ₋₇₄	218 ⁺²⁷³ ₋₆₈	216 ⁺¹²⁵ ₋₈₁	224 ⁺¹⁵⁸ ₋₉₄
7207	2.01 ± 0.38	135.89 ^{+0.06} _{-0.06}	120.47 ^{+0.07} _{-0.07}	106 ⁺⁶⁷ ₋₄₉	131 ⁺¹²⁰ ₋₄₂	148 ⁺⁷⁸ ₋₆₇	130 ⁺⁷⁸ ₋₅₉
7209	1.94 ± 0.51	132.85 ^{+0.07} _{-0.07}	117.33 ^{+0.07} _{-0.07}	103 ⁺⁶⁵ ₋₄₈	128 ⁺¹¹⁵ ₋₄₁	146 ⁺⁷⁵ ₋₆₆	127 ⁺⁷⁵ ₋₅₈
7213	3.86 ± 1.14	206.17 ^{+0.03} _{-0.03}	196.00 ^{+0.04} _{-0.04}	169 ⁺¹²⁸ ₋₇₁	206 ⁺²⁵⁰ ₋₆₄	207 ⁺¹¹⁶ ₋₇₉	212 ⁺¹⁴⁶ ₋₈₉
7219	3.02 ± 0.25	176.26 ^{+0.04} _{-0.04}	163.21 ^{+0.05} _{-0.05}	142 ⁺¹⁰⁰ ₋₆₂	174 ⁺¹⁹⁰ ₋₅₅	183 ⁺⁹² ₋₇₄	176 ⁺¹¹⁴ ₋₇₆
7227	10.10 ± 6.41	381.14 ^{+0.15} _{-0.15}	401.65 ^{+0.18} _{-0.18}	326 ⁺³⁴⁶ ₋₁₁₄	406 ⁺⁶⁷⁹ ₋₁₂₆	337 ⁺²⁸⁹ ₋₁₀₃	425 ⁺³⁸⁵ ₋₁₇₇
7228	2.55 ± 0.73	158.20 ^{+0.05} _{-0.05}	143.87 ^{+0.06} _{-0.06}	126 ⁺⁸⁴ ₋₅₆	154 ⁺¹⁵⁷ ₋₄₉	168 ⁺⁷⁹ ₋₇₁	155 ⁺⁹⁷ ₋₆₈
7230	8.44 ± 0.60	339.84 ^{+0.10} _{-0.10}	351.30 ^{+0.11} _{-0.11}	290 ⁺²⁸⁹ ₋₁₀₅	358 ⁺⁵⁷⁰ ₋₁₁₁	308 ⁺²⁴⁵ ₋₉₇	375 ⁺³²³ ₋₁₅₅
7233	0.68 [†]	67.75 ^{+0.12} _{-0.12}	53.44 ^{+0.12} _{-0.12}	47 ⁺²⁸ ₋₂₄	66 ⁺³⁶ ₋₂₃	87 ⁺³⁴ ₋₄₉	61 ⁺³⁹ ₋₃₂
7236*	3.08 ± 0.25	—	—	144 ⁺¹⁰² ₋₆₂	176 ⁺¹⁹⁵ ₋₅₅	185 ⁺⁹⁴ ₋₇₅	179 ⁺¹¹⁶ ₋₇₇
7238	9.03 ± 3.55	354.83 ^{+0.11} _{-0.11}	369.46 ^{+0.13} _{-0.13}	303 ⁺³⁰⁹ ₋₁₀₈	376 ⁺⁶⁰⁹ ₋₁₁₇	319 ⁺²⁶¹ ₋₉₉	393 ⁺³⁴⁵ ₋₁₆₃
7240*	25.90 ± 1.23	—	—	580 ⁺⁸²² ₋₁₈₀	757 ⁺¹⁵²⁶ ₋₂₅₀	531 ⁺⁶³⁸ ₋₁₄₈	786 ⁺⁸⁹² ₋₃₅₃
7247	27.00 ± 0.44	714.29 ^{+1.04} _{-1.04}	836.33 ^{+1.44} _{-1.44}	594 ⁺⁸⁵¹ ₋₁₈₄	777 ⁺¹⁵⁷⁴ ₋₂₅₇	542 ⁺⁹²² ₋₁₅₀	805 ⁺⁹²² ₋₃₆₄
7250	1.47 ± 0.23	111.28 ^{+0.08} _{-0.08}	95.39 ^{+0.09} _{-0.09}	84 ⁺⁵⁰ ₋₄₀	106 ⁺⁸⁴ ₋₃₅	127 ⁺⁵¹ ₋₆₁	104 ⁺⁶⁰ ₋₄₉
7255	4.85 ± 0.20	238.55 ^{+0.03} _{-0.03}	232.39 ^{+0.04} _{-0.04}	199 ⁺¹⁶³ ₋₈₀	242 ⁺³²¹ ₋₇₅	233 ⁺¹⁴⁴ ₋₈₄	251 ⁺¹⁸⁴ ₋₁₀₄
7263	9.04 ± 1.65	355.08 ^{+0.11} _{-0.11}	369.77 ^{+0.13} _{-0.13}	303 ⁺³¹⁰ ₋₁₀₉	376 ⁺⁶¹⁰ ₋₁₁₇	319 ⁺²⁶¹ ₋₉₉	393 ⁺³⁴⁵ ₋₁₆₃
7270	4.12 ± 0.60	214.94 ^{+0.03} _{-0.03}	205.77 ^{+0.04} _{-0.04}	177 ⁺¹³⁷ ₋₇₃	216 ⁺²⁶⁹ ₋₆₇	214 ⁺¹²³ ₋₈₁	222 ⁺¹⁵⁶ ₋₉₃
7277*	1.82 ± 0.07	—	—	98 ⁺⁶¹ ₋₄₆	123 ⁺¹⁰⁷ ₋₄₀	141 ⁺⁵⁹ ₋₆₅	121 ⁺⁷¹ ₋₅₅
7281*	3.06 ± 0.19	—	—	143 ⁺¹⁰¹ ₋₆₂	175 ⁺¹⁹³ ₋₅₅	184 ⁺⁹³ ₋₇₅	178 ⁺¹¹⁵ ₋₇₆
7283	19.70 ± 5.74	584.02 ^{+0.60} _{-0.60}	661.09 ^{+0.79} _{-0.79}	494 ⁺⁶⁵¹ ₋₁₅₇	636 ⁺¹²³² ₋₂₀₅	467 ⁺⁵¹⁵ ₋₁₃₁	663 ⁺⁷¹⁰ ₋₂₉₀
7285*	3.93 ± 0.55	—	—	171 ⁺¹³¹ ₋₇₁	209 ⁺²⁵⁵ ₋₆₅	209 ⁺¹¹⁸ ₋₉₀	214 ⁺¹⁴⁸ ₋₉₀
7287	24.60 ± 9.45	673.06 ^{+0.89} _{-0.89}	780.22 ^{+1.21} _{-1.21}	563 ⁺⁷⁸⁸ ₋₁₇₆	733 ⁺¹⁴⁶⁷ ₋₂₄₁	519 ⁺⁶¹⁴ ₋₁₄₄	761 ⁺⁸⁵⁵ ₋₃₄₀
7290	71.10 ± 6.13	1325.85 ^{+4.44} _{-4.42}	1721.99 ^{+6.88} _{-6.86}	1000 ⁺¹⁶⁷⁰ ₋₃₁₆	1350 ⁺²⁸⁷⁴ ₋₄₉₄	830 ⁺¹²¹⁶ ₋₂₅₇	1365 ⁺¹⁸⁵⁰ ₋₆₇₁

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
7292	7.42 ± 2.82	312.99 ^{+0.07} _{-0.07}	319.12 ^{+0.08} _{-0.08}	266 ⁺²⁵³ ₋₉₉	327 ⁺⁵⁰¹ ₋₁₀₁	289 ⁺²¹⁷ ₋₉₄	342 ⁺²⁸⁴ ₋₁₄₁
7293	2.73 ± 0.23	165.25 ^{+0.05} _{-0.05}	151.38 ^{+0.05} _{-0.05}	132 ⁺⁹⁰ ₋₅₈	162 ⁺¹⁷⁰ ₋₅₁	174 ⁺⁸⁴ ₋₇₂	163 ⁺¹⁰³ ₋₇₁
7294	62.90 ± 25.30	1226.02 ^{+3.75} _{-3.74}	1571.57 ^{+5.74} _{-5.72}	940 ⁺¹⁵⁵⁴ ₋₂₉₄	1266 ⁺²⁶⁹⁶ ₋₄₅₇	788 ⁺¹¹³⁹ ₋₂₃₉	1284 ⁺¹⁷⁰⁷ ₋₆₂₆
7295*	6.84 ± 0.63	—	—	252 ⁺²³³ ₋₉₅	309 ⁺⁴⁶¹ ₋₉₆	277 ⁺²⁰¹ ₋₉₂	322 ⁺²⁶¹ ₋₁₃₃
7297	29.10 ± 10.20	749.30 ^{+1.18} _{-1.18}	884.38 ^{+1.65} _{-1.64}	620 ⁺⁹⁰⁴ ₋₁₉₂	813 ⁺¹⁶⁶² ₋₂₇₁	561 ⁺⁶⁹⁵ ₋₁₅₆	842 ⁺⁹⁷⁹ ₋₃₈₃
7298	2.87 ± 0.79	170.61 ^{+0.04} _{-0.04}	157.13 ^{+0.05} _{-0.05}	137 ⁺⁹⁵ ₋₆₀	168 ⁺¹⁸⁰ ₋₅₃	178 ⁺⁸⁸ ₋₇₃	170 ⁺¹⁰⁸ ₋₇₃
7301*	7.81 ± 0.03	—	—	275 ⁺²⁶⁷ ₋₁₀₁	339 ⁺⁵²⁷ ₋₁₀₅	297 ⁺²²⁸ ₋₉₅	354 ⁺²⁹⁹ ₋₁₄₆
7305	24.50 ± 1.31	671.31 ^{+0.88} _{-0.88}	777.86 ^{+1.20} _{-1.20}	562 ⁺⁷⁸⁵ ₋₁₇₅	731 ⁺¹⁴⁶³ ₋₂₄₀	518 ⁺⁶¹² ₋₁₄₄	760 ⁺⁸⁵² ₋₃₃₉
7310*	7.65 ± 0.33	—	—	271 ⁺²⁶¹ ₋₁₀₀	334 ⁺⁵¹⁷ ₋₁₀₄	293 ⁺²²³ ₋₉₅	349 ⁺²⁹² ₋₁₄₄
7318*	21.80 ± 0.97	—	—	524 ⁺¹³⁷ ₋₁₆₆	679 ⁺¹³³⁶ ₋₂₂₁	490 ⁺⁵⁵⁹ ₋₁₃₆	707 ⁺⁷⁷⁴ ₋₃₁₂
7319	4.12 ± 0.46	214.94 ^{+0.03} _{-0.03}	205.77 ^{+0.04} _{-0.04}	177 ⁺¹³⁷ ₋₇₃	216 ⁺²⁶⁹ ₋₆₇	214 ⁺¹²³ ₋₈₁	222 ⁺¹⁵⁶ ₋₉₃
7322	6.35 ± 0.97	283.36 ^{+0.05} _{-0.05}	284.13 ^{+0.06} _{-0.06}	239 ⁺²¹⁶ ₋₉₁	293 ⁺⁴²⁷ ₋₉₁	267 ⁺¹⁸⁷ ₋₉₀	305 ⁺²⁴² ₋₁₂₆
7323	3.07 ± 0.92	178.12 ^{+0.04} _{-0.04}	165.23 ^{+0.05} _{-0.05}	144 ⁺¹⁰¹ ₋₆₂	176 ⁺¹⁹⁴ ₋₅₅	184 ⁺⁹³ ₋₇₅	178 ⁺¹¹⁶ ₋₇₇
7328	0.88 ± 0.28	80.12 ^{+0.11} _{-0.11}	65.00 ^{+0.11} _{-0.11}	57 ⁺³⁴ ₋₂₉	77 ⁺⁴⁸ ₋₂₆	98 ⁺³⁷ ₋₅₃	73 ⁺⁴³ ₋₃₇
7329	44.50 ± 2.25	982.86 ^{+2.29} _{-2.28}	1214.04 ^{+3.36} _{-3.35}	784 ⁺¹²⁴¹ ₋₂₄₁	1046 ⁺²²⁰⁸ ₋₃₆₄	679 ⁺⁹²⁸ ₋₁₉₆	1071 ⁺¹³⁴⁵ ₋₅₀₇
7335	9.53 ± 1.94	367.25 ^{+0.13} _{-0.13}	384.62 ^{+0.15} _{-0.15}	314 ⁺³²⁷ ₋₁₂₁	390 ⁺⁶⁴² ₋₁₀₁	328 ⁺¹⁷⁴ ₋₁₇₀	408 ⁺³⁶⁴ ₋₁₇₀
7343*	18.00 ± 0.09	—	—	468 ⁺⁶⁰⁰ ₋₁₅₁	600 ⁺¹¹⁴³ ₋₁₉₂	447 ⁺⁴⁷⁹ ₋₁₂₆	626 ⁺⁶⁵⁷ ₋₂₇₂
7344	57.80 ± 15.40	1161.56 ^{+3.34} _{-3.33}	1475.51 ^{+5.05} _{-5.04}	900 ⁺¹⁴⁷⁵ ₋₂₈₀	1210 ⁺²⁵⁷⁴ ₋₄₃₃	760 ⁺¹⁰⁸⁶ ₋₂₂₈	1230 ⁺¹⁶¹³ ₋₅₉₆
7352	2.16 ± 1.30	142.29 ^{+0.06} _{-0.06}	127.11 ^{+0.07} _{-0.07}	111 ⁺⁷² ₋₅₁	138 ⁺¹³⁰ ₋₄₄	154 ⁺⁶⁸ ₋₆₁	137 ⁺⁸³ ₋₆₁
7353	130.00 ± 10.80	1949.43 ^{+9.63} _{-9.58}	2700.92 ^{+16.02} _{-15.92}	1341 ⁺²²⁴² ₋₇₆	1813 ⁺³⁷⁸² ₋₇₀₇	1056 ⁺¹⁵⁹⁷ ₋₃₆₆	1807 ⁺²⁶⁹⁴ ₋₉₁₁
7357	7.76 ± 2.59	322.08 ^{+0.08} _{-0.08}	329.97 ^{+0.09} _{-0.09}	274 ⁺²⁶⁵ ₋₁₀₁	338 ⁺⁵²⁴ ₋₁₀₅	296 ⁺²²⁶ ₋₉₅	353 ⁺²⁹⁷ ₋₁₄₆
7358	4.46 ± 1.31	226.11 ^{+0.03} _{-0.03}	218.30 ^{+0.04} _{-0.04}	187 ⁺¹⁴⁹ ₋₇₁	228 ⁺²⁹³ ₋₈₂	223 ⁺¹³³ ₋₉₈	235 ⁺¹⁶⁹ ₋₉₈
7359	102.00 ± 98.40	1669.61 ^{+7.11} _{-7.08}	2253.91 ^{+11.51} _{-11.45}	1195 ⁺²⁰¹⁵ ₋₃₉₄	1618 ⁺³⁴¹² ₋₆₁₅	960 ⁺¹⁴⁴⁵ ₋₃₁₉	1620 ⁺²³²⁴ ₋₈₁₂
7360*	2.57 ± 0.10	—	—	126 ⁺⁸⁵ ₋₅₆	155 ⁺¹⁵⁹ ₋₄₉	168 ⁺⁸⁰ ₋₇₁	156 ⁺⁹⁷ ₋₆₈
7361	3.21 [†]	183.26 ^{+0.04} _{-0.04}	170.81 ^{+0.04} _{-0.04}	148 ⁺¹⁰⁶ ₋₆₄	181 ⁺²⁰⁴ ₋₅₇	189 ⁺⁹⁷ ₋₇₆	184 ⁺¹²¹ ₋₇₉
7366	24.70 ± 5.07	674.80 ^{+0.90} _{-0.89}	782.59 ^{+1.22} _{-1.22}	564 ⁺⁷⁹⁰ ₋₁₇₆	735 ⁺¹⁴⁷² ₋₂₄₁	520 ⁺⁶¹⁵ ₋₁₄₄	763 ⁺⁸⁵⁸ ₋₃₄₁
7367	1.36 [†]	105.88 ^{+0.09} _{-0.09}	90.02 ^{+0.09} _{-0.09}	79 ⁺⁴⁷ ₋₃₈	101 ⁺⁷⁷ ₋₃₄	122 ⁺⁴⁸ ₋₆₀	98 ⁺⁵⁷ ₋₄₇
7369	5.58 ± 1.00	260.90 ^{+0.04} _{-0.04}	258.01 ^{+0.04} _{-0.04}	219 ⁺¹⁸⁸ ₋₈₆	268 ⁺³⁷³ ₋₈₃	250 ⁺¹⁶⁵ ₋₈₇	278 ⁺²¹² ₋₁₁₅
7371	2.33 ± 1.87	149.34 ^{+0.06} _{-0.06}	134.50 ^{+0.06} _{-0.06}	118 ⁺⁷⁷ ₋₅₃	145 ⁺¹⁴² ₋₆₉	160 ⁺⁷³ ₋₆₄	145 ⁺⁸⁹ ₋₆₄
7374	2.85 ± 0.29	169.85 ^{+0.04} _{-0.04}	156.31 ^{+0.05} _{-0.05}	136 ⁺⁹⁴ ₋₆₀	167 ⁺¹⁷⁸ ₋₅₃	177 ⁺⁸⁷ ₋₇₃	169 ⁺¹⁰⁸ ₋₇₃
7375	10.50 ± 2.11	390.71 ^{+0.16} _{-0.16}	413.45 ^{+0.19} _{-0.19}	334 ⁺³⁶⁰ ₋₁₁₇	417 ⁺⁷⁰⁵ ₋₁₃₀	344 ⁺²⁹⁹ ₋₁₀₄	437 ⁺⁴⁰⁰ ₋₁₈₂
7376	1.26 ± 1.07	100.84 ^{+0.09} _{-0.09}	85.03 ^{+0.10} _{-0.10}	75 ⁺⁴⁴ ₋₃₇	96 ⁺⁷¹ ₋₃₂	117 ⁺⁴⁶ ₋₅₈	93 ⁺⁵⁴ ₋₄₅
7377	1.20 [†]	97.75 ^{+0.10} _{-0.10}	81.99 ^{+0.10} _{-0.10}	72 ⁺⁴² ₋₃₅	93 ⁺⁶⁷ ₋₃₁	115 ⁺⁴⁴ ₋₅₈	90 ⁺⁵² ₋₄₄
7378	50.10 ± 3.61	1060.18 ^{+2.72} _{-2.72}	1326.26 ^{+4.06} _{-4.04}	835 ⁺¹³⁴⁵ ₋₂₅₈	1118 ⁺²³⁷² ₋₃₉₄	715 ⁺⁹⁹⁹ ₋₂₀₉	1141 ⁺¹⁴⁶² ₋₅₄₆
7379	3.22 ± 0.67	183.63 ^{+0.04} _{-0.04}	171.21 ^{+0.04} _{-0.04}	149 ⁺¹⁰⁶ ₋₆₄	182 ⁺²⁰⁵ ₋₅₇	189 ⁺⁹⁸ ₋₇₉	185 ⁺¹²¹ ₋₇₉
7381	4.15 ± 3.17	215.94 ^{+0.03} _{-0.03}	206.88 ^{+0.04} _{-0.04}	178 ⁺¹³⁸ ₋₇₃	217 ⁺²⁷¹ ₋₆₈	215 ⁺¹²⁴ ₋₈₁	223 ⁺¹⁵⁷ ₋₉₄
7386	8.02 ± 3.22	328.93 ^{+0.09} _{-0.09}	338.18 ^{+0.10} _{-0.10}	280 ⁺²⁷⁴ ₋₁₀₂	346 ⁺⁵⁴² ₋₁₀₇	301 ⁺²³³ ₋₉₆	361 ⁺³⁰⁷ ₋₁₄₉
7387	1.55 ± 0.58	115.11 ^{+0.08} _{-0.08}	99.24 ^{+0.09} _{-0.09}	87 ⁺⁵³ ₋₄₂	110 ⁺⁹⁰ ₋₃₆	130 ⁺⁵³ ₋₆₂	108 ⁺⁶³ ₋₅₀
7390	3.06 ± 0.25	177.75 ^{+0.04} _{-0.04}	164.82 ^{+0.05} _{-0.05}	143 ⁺¹⁰¹ ₋₆₂	175 ⁺¹⁹³ ₋₅₅	184 ⁺⁹³ ₋₇₅	178 ⁺¹¹⁵ ₋₇₆
7403	2.83 ± 0.45	169.09 ^{+0.04} _{-0.04}	155.49 ^{+0.05} _{-0.05}	136 ⁺⁹³ ₋₅₉	166 ⁺¹⁷⁷ ₋₅₂	177 ⁺⁸⁷ ₋₇₃	168 ⁺¹⁰⁷ ₋₇₃
7404	1.87 ± 0.83	129.77 ^{+0.07} _{-0.07}	114.15 ^{+0.07} _{-0.07}	100 ⁺⁶² ₋₄₇	125 ⁺¹¹¹ ₋₄₀	143 ⁺⁶¹ ₋₆₅	124 ⁺⁷³ ₋₅₆
7427	14.20 ± 3.46	473.81 ^{+0.31} _{-0.31}	517.86 ^{+0.40} _{-0.40}	404 ⁺⁴⁸² ₋₁₃₅	512 ⁺⁹³¹ ₋₁₆₂	399 ⁺³⁹² ₋₁₁₅	536 ⁺⁵³¹ ₋₂₂₈
7429	5.31 ± 0.26	252.76 ^{+0.04} _{-0.04}	248.64 ^{+0.04} _{-0.04}	212 ⁺¹⁷⁹ ₋₈₃	258 ⁺³⁵³ ₋₈₀	244 ⁺¹⁵⁷ ₋₈₆	268 ⁺²⁰² ₋₁₁₁
7430	4.26 [†]	219.58 ^{+0.03} _{-0.03}	210.96 ^{+0.04} _{-0.04}	181 ⁺¹⁴² ₋₇₄	221 ⁺²⁷⁹ ₋₆₉	218 ⁺¹²⁷ ₋₈₁	228 ⁺¹⁶¹ ₋₉₅
7432	1.42 ± 0.82	108.84 ^{+0.09} _{-0.09}	92.96 ^{+0.09} _{-0.09}	82 ⁺⁴⁹ ₋₃₉	104 ⁺⁸¹ ₋₃₄	125 ⁺⁴⁹ ₋₆₀	101 ⁺⁵⁹ ₋₄₈
7433	1.78 ± 0.93	125.74 ^{+0.07} _{-0.07}	110.03 ^{+0.08} _{-0.08}	97 ⁺⁶⁰ ₋₄₅	121 ⁺¹⁰⁵ ₋₃₉	140 ⁺⁵⁸ ₋₆₄	119 ⁺⁷⁰ ₋₅₅
7440	14.10 ± 7.17	471.67 ^{+0.31} _{-0.31}	515.14 ^{+0.39} _{-0.39}	403 ⁺⁴⁷⁹ ₋₁₃₄	510 ⁺⁹²⁵ ₋₁₆₁	398 ⁺³⁸⁹ ₋₁₁₅	534 ⁺⁵²⁷ ₋₂₂₇
7443	1.64 ± 1.14	119.33 ^{+0.08} _{-0.08}	103.51 ^{+0.08} _{-0.08}	91 ⁺⁵⁵ ₋₄₃	114 ⁺⁹⁵ ₋₃₇	134 ⁺⁵⁵ ₋₆₃	112 ⁺⁶⁵ ₋₅₂
7446*	2.57 ± 0.33	—	—	126 ⁺⁸⁵ ₋₅₆	155 ⁺¹⁵⁹ ₋₄₉	168 ⁺⁸⁰ ₋₇₁	156 ⁺⁹⁷ ₋₆₈

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
7447	5.24 ± 2.16	$250.63^{+0.04}_{-0.04}$	$246.19^{+0.04}_{-0.04}$	210^{+176}_{-83}	256^{+349}_{-79}	242^{+155}_{-86}	265^{+199}_{-110}
7448	1.76^{\dagger}	$124.84^{+0.07}_{-0.07}$	$109.11^{+0.08}_{-0.08}$	96^{+59}_{-45}	120^{+103}_{-39}	139^{+58}_{-64}	118^{+69}_{-54}
7449	2.35 ± 1.14	$150.16^{+0.06}_{-0.06}$	$135.36^{+0.06}_{-0.06}$	118^{+78}_{-53}	146^{+144}_{-47}	161^{+73}_{-70}	146^{+90}_{-65}
7451	0.83 ± 0.41	$77.42^{+0.12}_{-0.11}$	$62.45^{+0.11}_{-0.11}$	55^{+32}_{-28}	74^{+45}_{-26}	96^{+36}_{-52}	70^{+42}_{-36}
7452	1.27 ± 0.88	$101.35^{+0.09}_{-0.09}$	$85.54^{+0.10}_{-0.10}$	75^{+44}_{-37}	97^{+72}_{-32}	118^{+46}_{-59}	94^{+54}_{-45}
7453	6.13^{\dagger}	$277.05^{+0.05}_{-0.05}$	$276.75^{+0.05}_{-0.05}$	234^{+208}_{-90}	286^{+411}_{-89}	262^{+181}_{-123}	298^{+234}_{-123}
7455	4.77 ± 2.84	$236.03^{+0.03}_{-0.03}$	$229.52^{+0.04}_{-0.04}$	196^{+160}_{-79}	240^{+315}_{-74}	231^{+142}_{-84}	247^{+181}_{-103}
7456	114.00 ± 11.80	$1792.55^{+8.18}_{-8.15}$	$2448.87^{+13.41}_{-13.34}$	1260^{+2120}_{-421}	1706^{+3580}_{-656}	1003^{+1515}_{-340}	1704^{+2488}_{-857}
7457*	8.87 ± 1.21	—	—	299^{+304}_{-108}	371^{+599}_{-99}	316^{+256}_{-59}	388^{+339}_{-161}
7460	1.79 ± 1.30	$126.20^{+0.07}_{-0.07}$	$110.49^{+0.08}_{-0.08}$	97^{+60}_{-45}	121^{+105}_{-39}	140^{+59}_{-65}	120^{+70}_{-55}
7464*	9.55 ± 0.25	—	—	314^{+327}_{-111}	390^{+644}_{-121}	328^{+274}_{-101}	409^{+364}_{-170}
7469	0.50 ± 0.27	$56.02^{+0.13}_{-0.13}$	$42.80^{+0.13}_{-0.13}$	38^{+24}_{-20}	56^{+27}_{-20}	75^{+31}_{-44}	51^{+35}_{-28}
7472	35.60 ± 4.26	$852.29^{+1.63}_{-1.63}$	$1027.89^{+2.33}_{-2.33}$	694^{+1057}_{-213}	919^{+1913}_{-312}	615^{+802}_{-173}	946^{+1142}_{-439}
7475*	1.86 ± 0.10	—	—	100^{+62}_{-46}	124^{+110}_{-40}	143^{+60}_{-65}	123^{+73}_{-56}
7477*	5.71 ± 0.26	—	—	222^{+193}_{-87}	272^{+382}_{-84}	253^{+169}_{-88}	282^{+217}_{-117}
7481	1.17 ± 0.34	$96.18^{+0.10}_{-0.10}$	$80.46^{+0.10}_{-0.10}$	71^{+42}_{-35}	92^{+65}_{-31}	113^{+44}_{-57}	88^{+51}_{-43}
7485	1.83 ± 1.13	$127.99^{+0.07}_{-0.07}$	$112.33^{+0.08}_{-0.08}$	99^{+61}_{-46}	123^{+108}_{-40}	142^{+60}_{-65}	122^{+72}_{-56}
7486	1.57 ± 0.93	$116.05^{+0.08}_{-0.08}$	$100.19^{+0.09}_{-0.09}$	88^{+53}_{-42}	111^{+91}_{-36}	131^{+53}_{-62}	109^{+63}_{-51}
7487	0.89 ± 0.57	$80.82^{+0.11}_{-0.11}$	$65.67^{+0.11}_{-0.11}$	58^{+34}_{-29}	77^{+48}_{-27}	99^{+38}_{-37}	73^{+44}_{-37}
7488	10.20 ± 1.15	$383.54^{+0.15}_{-0.15}$	$404.61^{+0.18}_{-0.18}$	328^{+350}_{-115}	409^{+686}_{-127}	339^{+292}_{-103}	428^{+388}_{-178}
7491*	12.40 ± 0.07	—	—	371^{+424}_{-126}	467^{+824}_{-147}	373^{+348}_{-110}	489^{+468}_{-206}
7493	0.93 ± 0.70	$83.17^{+0.11}_{-0.11}$	$67.91^{+0.11}_{-0.11}$	60^{+35}_{-30}	80^{+51}_{-27}	101^{+38}_{-53}	76^{+45}_{-38}
7494	1.83 ± 0.55	$127.99^{+0.07}_{-0.07}$	$112.33^{+0.08}_{-0.08}$	99^{+61}_{-46}	123^{+108}_{-40}	142^{+60}_{-65}	122^{+72}_{-56}
7495	5.61 ± 4.85	$261.79^{+0.04}_{-0.04}$	$259.04^{+0.04}_{-0.04}$	220^{+189}_{-86}	269^{+375}_{-83}	251^{+166}_{-87}	279^{+213}_{-115}
7496	9.72 ± 7.82	$371.91^{+0.14}_{-0.14}$	$390.32^{+0.16}_{-0.16}$	318^{+333}_{-112}	395^{+655}_{-123}	331^{+279}_{-102}	414^{+371}_{-172}
7497	1.67 ± 0.27	$120.72^{+0.08}_{-0.08}$	$104.92^{+0.08}_{-0.08}$	92^{+56}_{-44}	116^{+97}_{-38}	135^{+56}_{-63}	114^{+66}_{-53}
7500	2.08 ± 0.80	$138.90^{+0.06}_{-0.06}$	$123.58^{+0.07}_{-0.07}$	108^{+69}_{-50}	134^{+125}_{-43}	151^{+66}_{-67}	134^{+80}_{-60}
7502	2.21 ± 0.31	$144.38^{+0.06}_{-0.06}$	$129.30^{+0.06}_{-0.06}$	113^{+73}_{-52}	140^{+134}_{-45}	156^{+70}_{-68}	140^{+85}_{-62}
7503*	3.26 ± 0.18	—	—	150^{+108}_{-64}	183^{+207}_{-58}	190^{+99}_{-76}	187^{+123}_{-80}
7504	2.66 ± 0.50	$162.53^{+0.05}_{-0.05}$	$148.47^{+0.05}_{-0.05}$	130^{+68}_{-57}	159^{+165}_{-50}	171^{+82}_{-72}	160^{+101}_{-70}
7508	6.88 ± 6.71	$298.24^{+0.06}_{-0.06}$	$301.63^{+0.07}_{-0.07}$	253^{+234}_{-95}	310^{+464}_{-96}	278^{+202}_{-92}	324^{+263}_{-133}
7509	0.46^{\dagger}	$52.68^{+0.14}_{-0.14}$	$39.84^{+0.13}_{-0.13}$	36^{+23}_{-19}	53^{+25}_{-19}	72^{+31}_{-27}	48^{+35}_{-27}
7514	2.76^{\dagger}	$166.41^{+0.05}_{-0.05}$	$152.61^{+0.05}_{-0.05}$	133^{+91}_{-59}	163^{+172}_{-52}	175^{+85}_{-72}	165^{+104}_{-72}
7515*	3.73 ± 0.44	—	—	165^{+124}_{-69}	201^{+241}_{-63}	204^{+112}_{-78}	206^{+141}_{-87}
7517	0.99^{\dagger}	$86.39^{+0.11}_{-0.11}$	$70.98^{+0.11}_{-0.11}$	63^{+37}_{-31}	83^{+54}_{-28}	104^{+40}_{-39}	79^{+46}_{-39}
7518	8.99 ± 0.72	$353.82^{+0.11}_{-0.11}$	$368.24^{+0.13}_{-0.13}$	302^{+308}_{-108}	374^{+607}_{-116}	318^{+260}_{-99}	392^{+343}_{-162}
7520	3.53 ± 0.19	$194.73^{+0.04}_{-0.04}$	$183.36^{+0.04}_{-0.04}$	159^{+117}_{-67}	194^{+227}_{-61}	198^{+106}_{-77}	198^{+133}_{-84}
7523	2.78 ± 1.03	$167.18^{+0.05}_{-0.05}$	$153.44^{+0.05}_{-0.05}$	134^{+92}_{-59}	164^{+174}_{-52}	175^{+85}_{-73}	166^{+105}_{-72}
7526	51.40 ± 26.50	$1077.67^{+2.82}_{-2.82}$	$1351.85^{+4.22}_{-4.21}$	846^{+1368}_{-262}	1134^{+2408}_{-401}	723^{+1014}_{-212}	1157^{+1488}_{-555}
7527*	6.50 ± 0.40	—	—	243^{+221}_{-92}	298^{+437}_{-92}	270^{+191}_{-91}	310^{+248}_{-128}
7528	3.67 ± 1.34	$199.63^{+0.04}_{-0.04}$	$188.76^{+0.04}_{-0.04}$	163^{+122}_{-69}	199^{+237}_{-62}	202^{+110}_{-86}	204^{+138}_{-86}
7529	2.72 ± 0.31	$164.86^{+0.05}_{-0.05}$	$150.96^{+0.05}_{-0.05}$	132^{+90}_{-58}	161^{+169}_{-51}	173^{+84}_{-72}	163^{+103}_{-71}
7530*	1.93 ± 0.18	—	—	103^{+54}_{-48}	128^{+115}_{-41}	145^{+62}_{-66}	127^{+75}_{-57}
7532	2.12 ± 1.45	$140.60^{+0.06}_{-0.06}$	$125.35^{+0.07}_{-0.07}$	110^{+70}_{-50}	136^{+128}_{-44}	153^{+67}_{-68}	136^{+82}_{-61}
7533	3.24 ± 1.23	$184.36^{+0.04}_{-0.04}$	$172.00^{+0.04}_{-0.04}$	149^{+107}_{-64}	182^{+206}_{-57}	189^{+98}_{-76}	180^{+122}_{-79}
7535	2.55^{\dagger}	$158.20^{+0.05}_{-0.05}$	$143.87^{+0.06}_{-0.06}$	126^{+84}_{-56}	154^{+157}_{-49}	168^{+79}_{-71}	155^{+97}_{-68}
7547	13.20 ± 2.84	$452.21^{+0.27}_{-0.27}$	$490.41^{+0.34}_{-0.34}$	386^{+450}_{-130}	488^{+872}_{-154}	385^{+368}_{-112}	511^{+496}_{-216}
7548	2.68 ± 0.29	$163.31^{+0.05}_{-0.05}$	$149.30^{+0.05}_{-0.05}$	130^{+88}_{-58}	160^{+167}_{-51}	172^{+83}_{-72}	161^{+101}_{-70}
7549*	5.15 ± 0.05	—	—	207^{+173}_{-82}	253^{+342}_{-78}	240^{+153}_{-85}	262^{+195}_{-109}

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
7550	2.48 ± 0.34	$155.42^{+0.05}_{-0.05}$	$140.91^{+0.06}_{-0.06}$	123^{+82}_{-55}	151^{+153}_{-48}	165^{+77}_{-71}	152^{+94}_{-67}
7551	0.48^\dagger	$54.51^{+0.13}_{-0.13}$	$41.46^{+0.13}_{-0.13}$	37^{+23}_{-19}	54^{+26}_{-20}	74^{+31}_{-44}	50^{+35}_{-28}
7552	0.53^\dagger	$58.27^{+0.13}_{-0.13}$	$44.82^{+0.13}_{-0.12}$	40^{+25}_{-21}	58^{+28}_{-21}	78^{+32}_{-45}	53^{+36}_{-29}
7554	9.32 ± 7.46	$362.06^{+0.12}_{-0.12}$	$378.28^{+0.14}_{-0.14}$	309^{+319}_{-110}	384^{+628}_{-119}	324^{+268}_{-100}	402^{+356}_{-167}
7559	1.31^\dagger	$103.38^{+0.09}_{-0.09}$	$87.54^{+0.10}_{-0.10}$	77^{+46}_{-37}	99^{+74}_{-33}	120^{+47}_{-59}	96^{+55}_{-46}
7560*	1.87 ± 0.09	—	—	100^{+62}_{-47}	125^{+111}_{-40}	143^{+61}_{-65}	124^{+73}_{-56}
7563	7.41 ± 3.10	$312.72^{+0.07}_{-0.07}$	$318.80^{+0.08}_{-0.08}$	265^{+253}_{-99}	327^{+500}_{-101}	289^{+216}_{-94}	341^{+283}_{-141}
7564	0.66 ± 0.63	$66.65^{+0.12}_{-0.12}$	$52.44^{+0.12}_{-0.12}$	46^{+28}_{-24}	65^{+35}_{-23}	86^{+33}_{-48}	60^{+38}_{-32}
7566	4.17 ± 0.89	$216.60^{+0.03}_{-0.03}$	$207.63^{+0.04}_{-0.04}$	179^{+139}_{-74}	218^{+272}_{-68}	216^{+125}_{-94}	224^{+157}_{-94}
7567	0.64 ± 0.51	$65.09^{+0.13}_{-0.13}$	$51.00^{+0.12}_{-0.12}$	45^{+27}_{-23}	63^{+34}_{-22}	84^{+33}_{-48}	59^{+38}_{-31}
7568	8.20 ± 2.76	$333.63^{+0.09}_{-0.09}$	$343.82^{+0.10}_{-0.10}$	284^{+281}_{-104}	351^{+554}_{-109}	304^{+238}_{-97}	367^{+313}_{-152}
7573	4.13 ± 0.97	$215.27^{+0.03}_{-0.03}$	$206.14^{+0.04}_{-0.04}$	178^{+138}_{-73}	216^{+269}_{-67}	214^{+124}_{-81}	222^{+156}_{-93}
7575*	12.90 ± 0.16	—	—	381^{+440}_{-129}	480^{+854}_{-151}	381^{+360}_{-111}	503^{+486}_{-212}
7576	8.01 ± 3.22	$328.67^{+0.09}_{-0.09}$	$337.86^{+0.10}_{-0.10}$	280^{+274}_{-102}	345^{+541}_{-107}	300^{+233}_{-96}	361^{+306}_{-149}
7579	3.95 ± 0.93	$209.23^{+0.03}_{-0.03}$	$199.40^{+0.04}_{-0.04}$	172^{+131}_{-71}	210^{+257}_{-65}	210^{+118}_{-80}	215^{+149}_{-90}
7580	1.21 ± 1.02	$98.27^{+0.10}_{-0.10}$	$82.50^{+0.10}_{-0.10}$	73^{+43}_{-36}	94^{+68}_{-31}	115^{+44}_{-58}	91^{+52}_{-44}
7581	40.80 ± 10.50	$929.85^{+2.01}_{-2.01}$	$1137.92^{+2.92}_{-2.91}$	748^{+1168}_{-230}	995^{+2091}_{-343}	653^{+878}_{-186}	1021^{+1263}_{-480}
7584	17.40^\dagger	$539.49^{+0.47}_{-0.47}$	$602.62^{+0.61}_{-0.61}$	458^{+582}_{-148}	586^{+1111}_{-188}	440^{+465}_{-124}	613^{+637}_{-265}
7587	2.64 ± 2.01	$161.75^{+0.05}_{-0.05}$	$147.64^{+0.05}_{-0.05}$	129^{+87}_{-57}	158^{+164}_{-50}	171^{+81}_{-72}	159^{+100}_{-70}
7588	2.12 ± 0.33	$140.60^{+0.06}_{-0.06}$	$125.35^{+0.07}_{-0.07}$	110^{+70}_{-50}	136^{+128}_{-44}	153^{+67}_{-68}	136^{+82}_{-61}
7595	3.44 ± 3.01	$191.55^{+0.04}_{-0.04}$	$179.86^{+0.04}_{-0.04}$	156^{+114}_{-66}	190^{+220}_{-60}	195^{+104}_{-77}	194^{+130}_{-82}
7597	5.05 ± 1.63	$244.78^{+0.04}_{-0.04}$	$239.50^{+0.04}_{-0.04}$	204^{+170}_{-81}	249^{+335}_{-77}	238^{+150}_{-85}	258^{+192}_{-107}
7598	1.04 ± 0.15	$89.21^{+0.10}_{-0.10}$	$73.69^{+0.11}_{-0.11}$	65^{+38}_{-32}	85^{+57}_{-29}	107^{+41}_{-55}	82^{+48}_{-40}
7599	33.80 ± 6.57	$824.50^{+1.50}_{-1.50}$	$988.87^{+2.13}_{-2.13}$	674^{+1016}_{-207}	891^{+1847}_{-301}	600^{+774}_{-168}	919^{+1099}_{-424}
7601	11.40 ± 5.31	$411.79^{+0.20}_{-0.20}$	$439.61^{+0.24}_{-0.24}$	352^{+390}_{-121}	441^{+762}_{-138}	358^{+432}_{-107}	462^{+432}_{-194}
7602	13.20 ± 7.50	$452.21^{+0.27}_{-0.27}$	$490.41^{+0.34}_{-0.34}$	386^{+450}_{-130}	488^{+368}_{-154}	385^{+368}_{-112}	511^{+496}_{-216}
7603	1.22^\dagger	$98.78^{+0.10}_{-0.10}$	$83.01^{+0.10}_{-0.10}$	73^{+43}_{-36}	94^{+68}_{-32}	116^{+45}_{-58}	91^{+53}_{-44}
7604	0.77^\dagger	$73.81^{+0.12}_{-0.12}$	$59.06^{+0.12}_{-0.12}$	52^{+31}_{-27}	71^{+42}_{-25}	92^{+35}_{-51}	67^{+41}_{-35}
7605	1.88 ± 0.16	$130.21^{+0.07}_{-0.07}$	$114.61^{+0.07}_{-0.07}$	101^{+63}_{-47}	125^{+111}_{-41}	144^{+61}_{-65}	124^{+73}_{-56}
7606	4.63 ± 2.14	$231.58^{+0.03}_{-0.03}$	$224.48^{+0.04}_{-0.04}$	192^{+155}_{-78}	235^{+305}_{-83}	227^{+138}_{-101}	242^{+175}_{-101}
7607	2.13 ± 0.24	$141.02^{+0.06}_{-0.06}$	$125.79^{+0.07}_{-0.07}$	110^{+71}_{-50}	136^{+128}_{-44}	153^{+68}_{-68}	136^{+82}_{-61}
7608	1.55 ± 0.66	$115.11^{+0.08}_{-0.08}$	$99.24^{+0.09}_{-0.09}$	87^{+53}_{-42}	110^{+90}_{-36}	130^{+53}_{-62}	108^{+63}_{-50}
7609	1.04 ± 0.20	$89.21^{+0.10}_{-0.10}$	$73.69^{+0.11}_{-0.11}$	65^{+38}_{-32}	85^{+57}_{-29}	107^{+41}_{-55}	82^{+48}_{-40}
7614	3.01 ± 0.37	$175.89^{+0.04}_{-0.04}$	$162.81^{+0.05}_{-0.05}$	142^{+99}_{-62}	173^{+190}_{-55}	182^{+92}_{-74}	176^{+114}_{-76}
7615	0.91 ± 0.63	$81.68^{+0.11}_{-0.11}$	$66.49^{+0.11}_{-0.11}$	59^{+34}_{-30}	78^{+49}_{-27}	100^{+38}_{-53}	74^{+44}_{-38}
7616	1.81^\dagger	$127.09^{+0.07}_{-0.07}$	$111.41^{+0.08}_{-0.08}$	98^{+61}_{-46}	122^{+107}_{-40}	141^{+59}_{-65}	121^{+71}_{-55}
7617	5.31 ± 0.95	$252.76^{+0.04}_{-0.04}$	$248.64^{+0.04}_{-0.04}$	212^{+179}_{-83}	258^{+353}_{-80}	244^{+157}_{-86}	268^{+202}_{-111}
7619	0.79 ± 0.51	$74.90^{+0.12}_{-0.12}$	$60.09^{+0.12}_{-0.12}$	53^{+31}_{-27}	72^{+43}_{-25}	93^{+46}_{-51}	68^{+41}_{-35}
7625	1.40 ± 0.57	$107.86^{+0.09}_{-0.09}$	$91.99^{+0.09}_{-0.09}$	81^{+48}_{-39}	103^{+80}_{-34}	124^{+49}_{-60}	100^{+58}_{-48}
7626	18.70 ± 5.12	$564.90^{+0.54}_{-0.54}$	$635.90^{+0.71}_{-0.71}$	479^{+621}_{-154}	615^{+1180}_{-198}	456^{+494}_{-128}	642^{+679}_{-279}
7630	3.22 ± 0.59	$183.63^{+0.04}_{-0.04}$	$171.21^{+0.04}_{-0.04}$	149^{+106}_{-64}	182^{+205}_{-57}	189^{+98}_{-76}	185^{+121}_{-79}
7635	4.34 ± 1.03	$222.20^{+0.03}_{-0.03}$	$213.91^{+0.04}_{-0.04}$	184^{+145}_{-75}	224^{+284}_{-70}	220^{+130}_{-82}	231^{+164}_{-96}
7638	0.99 ± 0.31	$86.39^{+0.11}_{-0.11}$	$70.98^{+0.11}_{-0.11}$	63^{+37}_{-31}	83^{+54}_{-28}	104^{+40}_{-54}	79^{+46}_{-39}
7639	2.90^\dagger	$171.75^{+0.04}_{-0.04}$	$158.35^{+0.05}_{-0.05}$	138^{+96}_{-60}	169^{+182}_{-53}	179^{+89}_{-74}	171^{+109}_{-74}
7642	0.79 ± 0.66	$74.90^{+0.12}_{-0.12}$	$60.09^{+0.12}_{-0.12}$	53^{+31}_{-27}	72^{+43}_{-25}	93^{+36}_{-51}	68^{+41}_{-35}
7645	1.25 ± 0.65	$100.33^{+0.09}_{-0.09}$	$84.53^{+0.10}_{-0.10}$	74^{+44}_{-36}	96^{+70}_{-32}	117^{+45}_{-58}	93^{+53}_{-45}
7647*	29.70 ± 1.12	—	—	627^{+919}_{-194}	824^{+1687}_{-275}	566^{+706}_{-158}	852^{+994}_{-388}
7648	2.95 ± 0.37	$173.64^{+0.04}_{-0.04}$	$160.38^{+0.05}_{-0.05}$	140^{+97}_{-61}	171^{+185}_{-54}	181^{+90}_{-74}	173^{+111}_{-75}
7654	2.58 ± 0.85	$159.39^{+0.05}_{-0.05}$	$145.13^{+0.05}_{-0.05}$	127^{+85}_{-56}	156^{+160}_{-49}	169^{+80}_{-71}	157^{+98}_{-69}

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
7656	39.60 ± 6.92	912.28 ^{+1.92} _{-1.92}	1112.86 ^{+2.78} _{-2.78}	736 ⁺¹¹⁴³ ₋₂₂₆	978 ⁺²⁰⁵² ₋₃₃₆	645 ⁺⁸⁶¹ ₋₁₈₃	1005 ⁺¹²³⁶ ₋₄₇₁
7657	1.83 ± 0.28	127.99 ^{+0.07} _{-0.07}	112.33 ^{+0.08} _{-0.08}	99 ⁺⁶¹ ₋₄₆	123 ⁺¹⁰⁸ ₋₄₀	142 ⁺⁶⁰ ₋₆₅	122 ⁺⁷² ₋₅₆
7660*	8.44 ± 0.49	—	—	290 ⁺²⁸⁹ ₋₁₀₅	358 ⁺⁵⁷⁰ ₋₁₁₁	308 ⁺²⁴⁵ ₋₉₇	375 ⁺³²³ ₋₁₅₅
7662	1.09 [†]	91.92 ^{+0.10} _{-0.10}	76.32 ^{+0.10} _{-0.10}	67 ⁺³⁹ ₋₃₃	88 ⁺⁶⁰ ₋₃₀	109 ⁺⁴² ₋₅₆	84 ⁺⁴⁹ ₋₄₁
7663	3.70 ± 0.54	200.67 ^{+0.03} _{-0.03}	189.91 ^{+0.04} _{-0.04}	164 ⁺¹²³ ₋₆₉	200 ⁺²³⁹ ₋₇₈	203 ⁺¹¹¹ ₋₈₇	205 ⁺¹³⁹ ₋₈₇
7671	2.91 [†]	172.13 ^{+0.04} _{-0.04}	158.76 ^{+0.05} _{-0.05}	138 ⁺⁹⁶ ₋₆₀	169 ⁺¹⁸³ ₋₅₃	179 ⁺⁸⁹ ₋₇₄	171 ⁺¹¹⁰ ₋₇₄
7674	14.80 ± 6.63	486.50 ^{+0.34} _{-0.34}	534.10 ^{+0.43} _{-0.43}	415 ⁺⁵⁰¹ ₋₁₃₇	527 ⁺⁹⁶⁶ ₋₁₆₇	407 ⁺⁴⁰⁶ ₋₁₁₇	551 ⁺⁵⁵¹ ₋₂₃₅
7677	6.31 ± 1.16	282.21 ^{+0.05} _{-0.05}	282.79 ^{+0.05} _{-0.05}	238 ⁺²¹⁴ ₋₉₁	292 ⁺⁴²⁴ ₋₉₀	266 ⁺¹⁸⁶ ₋₉₀	304 ⁺²⁴¹ ₋₁₂₅
7678*	8.52 ± 0.07	—	—	291 ⁺²⁹² ₋₁₀₅	361 ⁺⁵⁷⁵ ₋₁₁₂	310 ⁺²⁴⁷ ₋₉₈	377 ⁺³²⁶ ₋₁₅₆
7683	0.40 [†]	48.06 ^{+0.14} _{-0.14}	35.80 ^{+0.13} _{-0.13}	32 ⁺²¹ ₋₁₇	49 ⁺²² ₋₁₈	68 ⁺³⁰ ₋₄₁	45 ⁺³⁴ ₋₂₅
7684	22.20 ± 2.55	630.34 ^{+0.74} _{-0.74}	722.71 ^{+1.00} _{-1.00}	530 ⁺⁷²² ₋₁₆₇	687 ⁺¹³⁵⁵ ₋₂₂₄	494 ⁺⁵⁶⁷ ₋₁₃₇	715 ⁺⁷⁸⁶ ₋₃₁₆
7688*	8.52 ± 0.37	—	—	291 ⁺²⁹² ₋₁₀₅	361 ⁺⁵⁷⁵ ₋₁₁₂	310 ⁺²⁴⁷ ₋₉₈	377 ⁺³²⁶ ₋₁₅₆
7695*	25.00 ± 0.26	—	—	568 ⁺⁷⁹⁸ ₋₁₇₇	740 ⁺¹⁴⁸⁶ ₋₂₄₄	523 ⁺⁶²¹ ₋₁₄₅	769 ⁺⁸⁶⁷ ₋₃₄₄
7701	2.62 ± 0.62	160.97 ^{+0.05} _{-0.05}	146.80 ^{+0.05} _{-0.05}	128 ⁺⁸⁶ ₋₅₇	157 ⁺¹⁶² ₋₅₀	170 ⁺⁸¹ ₋₆₉	159 ⁺⁹⁹ ₋₆₉
7703*	3.76 ± 1.16	—	—	166 ⁺¹²⁵ ₋₇₀	202 ⁺²⁴³ ₋₆₃	204 ⁺¹¹³ ₋₇₉	207 ⁺¹⁴² ₋₈₇
7705	4.86 ± 1.79	238.86 ^{+0.03} _{-0.03}	232.75 ^{+0.04} _{-0.04}	199 ⁺¹⁶³ ₋₈₀	243 ⁺³²² ₋₇₅	233 ⁺¹⁴⁵ ₋₈₄	251 ⁺¹⁸⁴ ₋₁₀₄
7706	20.00 ± 5.15	589.68 ^{+0.61} _{-0.61}	668.59 ^{+0.82} _{-0.81}	498 ⁺⁶⁵⁹ ₋₁₅₉	642 ⁺¹²⁴⁷ ₋₂₀₇	471 ⁺⁵²² ₋₁₃₁	670 ⁺⁷¹⁹ ₋₂₉₃
7707	3.04 ± 0.84	177.00 ^{+0.04} _{-0.04}	164.02 ^{+0.05} _{-0.05}	143 ⁺¹⁰⁰ ₋₆₂	174 ⁺¹⁹² ₋₅₅	183 ⁺⁹³ ₋₇₄	177 ⁺¹¹⁵ ₋₇₆
7710	10.20 ± 4.43	383.54 ^{+0.15} _{-0.15}	404.61 ^{+0.18} _{-0.18}	328 ⁺³⁵⁰ ₋₁₁₅	409 ⁺⁶⁸⁶ ₋₁₂₇	339 ⁺²⁹² ₋₁₀₃	428 ⁺³⁸⁸ ₋₁₇₈
7711	2.47 ± 0.32	155.02 ^{+0.05} _{-0.05}	140.49 ^{+0.06} _{-0.06}	123 ⁺⁸¹ ₋₅₅	151 ⁺¹⁵² ₋₄₈	165 ⁺⁷⁷ ₋₇₀	152 ⁺⁹⁴ ₋₆₇
7727	1.12 ± 0.12	93.53 ^{+0.10} _{-0.10}	77.88 ^{+0.10} _{-0.10}	69 ⁺⁴⁰ ₋₃₄	89 ⁺⁶² ₋₃₀	111 ⁺⁴² ₋₄₂	86 ⁺⁵⁰ ₋₄₂
7729	7.14 ± 1.46	305.40 ^{+0.07} _{-0.07}	310.09 ^{+0.07} _{-0.07}	259 ⁺²⁴³ ₋₉₇	319 ⁺⁴⁸² ₋₉₉	283 ⁺²⁰⁹ ₋₉₃	332 ⁺²⁷³ ₋₁₃₇
7734	3.43 ± 2.24	191.19 ^{+0.04} _{-0.04}	179.47 ^{+0.04} _{-0.04}	156 ⁺¹¹⁴ ₋₆₆	190 ⁺²²⁰ ₋₁₀₄	195 ⁺¹²⁹ ₋₇₇	194 ⁺¹²⁹ ₋₈₂
7735	54.90 ± 24.30	1123.98 ^{+3.10} _{-3.09}	1419.93 ^{+4.67} _{-4.66}	876 ⁺¹⁴²⁸ ₋₂₇₂	1176 ⁺²⁵⁰¹ ₋₄₁₈	744 ⁺¹⁰⁵⁴ ₋₂₂₁	1197 ⁺¹⁵⁵⁷ ₋₅₇₈
7741	0.21 [†]	31.91 ^{+0.14} _{-0.14}	22.19 ^{+0.12} _{-0.12}	21 ⁺¹⁷ ₋₁₁	37 ⁺¹³ ₋₁₄	52 ⁺²⁹ ₋₃₄	32 ⁺³³ ₋₂₀
7744	0.73 ± 0.18	71.40 ^{+0.12} _{-0.12}	56.83 ^{+0.12} _{-0.12}	50 ⁺³⁰ ₋₂₆	69 ⁺³⁹ ₋₂₄	90 ⁺³⁵ ₋₅₀	65 ⁺⁴⁰ ₋₃₄
7745	4.50 ± 2.40	227.40 ^{+0.03} _{-0.03}	219.76 ^{+0.04} _{-0.04}	189 ⁺¹⁵¹ ₋₇₇	230 ⁺²⁹⁶ ₋₇₁	224 ⁺¹³⁴ ₋₈₂	237 ⁺¹⁷⁰ ₋₉₉
7749	6.93 ± 4.55	299.63 ^{+0.06} _{-0.06}	303.27 ^{+0.07} _{-0.07}	254 ⁺²³⁶ ₋₉₅	312 ⁺⁴⁶⁷ ₋₉₇	279 ⁺²⁰³ ₋₉₂	325 ⁺²⁶⁵ ₋₁₃₄
7750	1.06 ± 0.32	90.30 ^{+0.10} _{-0.10}	74.75 ^{+0.11} _{-0.11}	66 ⁺³⁹ ₋₃₃	86 ⁺⁵⁸ ₋₂₉	108 ⁺⁴¹ ₋₅₆	83 ⁺⁴⁸ ₋₄₁
7752	6.31 ± 0.70	282.21 ^{+0.05} _{-0.05}	282.79 ^{+0.05} _{-0.05}	238 ⁺²¹⁴ ₋₉₁	292 ⁺⁴²⁴ ₋₉₀	266 ⁺¹⁸⁶ ₋₉₀	304 ⁺²⁴¹ ₋₁₂₅
7753	6.24 ± 1.08	280.21 ^{+0.05} _{-0.05}	280.45 ^{+0.05} _{-0.05}	236 ⁺²¹² ₋₉₁	290 ⁺⁴¹⁹ ₋₉₀	265 ⁺¹⁸⁴ ₋₉₀	301 ⁺²³⁸ ₋₁₂₄
7754	1.93 ± 1.69	132.41 ^{+0.07} _{-0.07}	116.87 ^{+0.07} _{-0.07}	103 ⁺⁶⁴ ₋₄₈	128 ⁺¹¹⁵ ₋₄₁	145 ⁺⁶² ₋₆₆	127 ⁺⁷⁵ ₋₅₇
7762	1.01 ± 0.30	87.56 ^{+0.11} _{-0.11}	72.10 ^{+0.11} _{-0.11}	64 ⁺³⁷ ₋₃₂	84 ⁺⁵⁵ ₋₂₈	105 ⁺⁴⁰ ₋₅₅	80 ⁺⁴⁷ ₋₄₀
7766	48.20 ± 1.07	1034.31 ^{+2.57} _{-2.57}	1288.56 ^{+3.82} _{-3.81}	818 ⁺¹³¹¹ ₋₂₅₂	1094 ⁺²³¹⁸ ₋₃₈₄	703 ⁺⁹⁷⁶ ₋₂₀₅	1118 ⁺¹⁴²³ ₋₅₃₄
7769	1.06 ± 0.30	90.30 ^{+0.10} _{-0.10}	74.75 ^{+0.11} _{-0.11}	66 ⁺³⁹ ₋₃₃	86 ⁺⁵⁸ ₋₂₉	108 ⁺⁴¹ ₋₅₆	83 ⁺⁴⁸ ₋₄₁
7770	1.86 ± 0.43	129.33 ^{+0.07} _{-0.07}	113.70 ^{+0.08} _{-0.07}	100 ⁺⁶² ₋₄₆	124 ⁺¹¹⁰ ₋₄₀	143 ⁺⁷³ ₋₆₅	123 ⁺⁷³ ₋₅₆
7775	6.24 ± 1.31	280.21 ^{+0.05} _{-0.05}	280.45 ^{+0.05} _{-0.05}	236 ⁺²¹² ₋₉₁	290 ⁺⁴¹⁹ ₋₉₀	265 ⁺¹⁸⁴ ₋₉₀	301 ⁺²³⁸ ₋₁₂₄
7780	3.48 ± 3.23	192.97 ^{+0.04} _{-0.04}	181.42 ^{+0.04} _{-0.04}	157 ⁺¹¹⁵ ₋₆₇	192 ⁺²²³ ₋₆₀	196 ⁺¹⁰⁵ ₋₇₇	196 ⁺¹³¹ ₋₈₃
7781	1.33 ± 0.21	104.38 ^{+0.09} _{-0.09}	88.53 ^{+0.09} _{-0.09}	78 ⁺⁴⁶ ₋₃₈	100 ⁺⁷⁵ ₋₃₃	121 ⁺⁴⁷ ₋₅₉	97 ⁺⁵⁶ ₋₄₆
7784	2.00 ± 0.36	135.46 ^{+0.06} _{-0.06}	120.02 ^{+0.07} _{-0.07}	105 ⁺⁶⁶ ₋₄₉	131 ⁺¹²⁰ ₋₄₂	148 ⁺⁶⁴ ₋₆₇	130 ⁺⁷⁷ ₋₅₉
7785	1.15 ± 0.10	95.13 ^{+0.10} _{-0.10}	79.43 ^{+0.10} _{-0.10}	70 ⁺⁴¹ ₋₃₄	91 ⁺⁶⁴ ₋₃₀	112 ⁺⁴³ ₋₅₇	87 ⁺⁵¹ ₋₄₃
7786	3.22 ± 0.64	183.63 ^{+0.04} _{-0.04}	171.21 ^{+0.04} _{-0.04}	149 ⁺¹⁰⁶ ₋₆₄	182 ⁺²⁰⁵ ₋₅₇	189 ⁺⁹⁸ ₋₇₆	185 ⁺¹²¹ ₋₇₉
7788*	4.81 ± 0.27	—	—	198 ⁺¹⁶¹ ₋₇₉	241 ⁺³¹⁸ ₋₇₅	232 ⁺¹⁴³ ₋₈₄	249 ⁺¹⁸² ₋₁₀₃
7789	61.20 ± 10.50	1204.75 ^{+3.61} _{-3.60}	1539.78 ^{+5.51} _{-5.49}	926 ⁺¹⁵²⁸ ₋₂₈₉	1248 ⁺²⁶⁵⁶ ₋₄₄₉	779 ⁺¹¹²² ₋₂₃₅	1266 ⁺¹⁶⁷⁶ ₋₆₁₆
7790	0.26 ± 0.22	36.71 ^{+0.14} _{-0.14}	26.13 ^{+0.13} _{-0.12}	24 ⁺¹⁸ ₋₁₃	40 ⁺¹⁵ ₋₁₅	56 ⁺²⁹ ₋₃₆	36 ⁺³³ ₋₂₁
7791	0.51 [†]	56.37 ^{+0.13} _{-0.13}	43.12 ^{+0.13} _{-0.13}	38 ⁺²⁴ ₋₂₀	56 ⁺²⁷ ₋₂₀	76 ⁺³¹ ₋₄₄	51 ⁺³⁶ ₋₂₈
7792	0.30 ± 0.16	40.49 ^{+0.14} _{-0.14}	29.30 ^{+0.13} _{-0.13}	27 ⁺¹⁹ ₋₁₄	43 ⁺¹⁷ ₋₁₆	60 ⁺²⁹ ₋₃₈	39 ⁺³³ ₋₂₃
7793	40.50 ± 2.67	925.47 ^{+1.99} _{-1.98}	1131.68 ^{+2.89} _{-2.88}	745 ⁺¹¹⁶¹ ₋₂₂₉	991 ⁺²⁰⁸² ₋₃₄₁	651 ⁺⁸⁷⁴ ₋₁₈₆	1017 ⁺¹²⁵⁷ ₋₄₇₈
7794*	4.20 ± 0.20	—	—	180 ⁺¹⁴⁰ ₋₇₄	219 ⁺²⁷⁴ ₋₆₈	216 ⁺¹⁵⁹ ₋₈₁	225 ⁺¹⁵⁹ ₋₉₄

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Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
7795	1.02 ± 0.76	88.11 ^{+0.11} _{-0.11}	72.63 ^{+0.11} _{-0.11}	64 ⁺³⁷ ₋₃₂	84 ⁺⁵⁶ ₋₂₉	106 ⁺⁴⁰ ₋₅₅	81 ⁺⁴⁷ ₋₄₀
7798	1.73 ± 1.50	123.48 ^{+0.07} _{-0.07}	107.72 ^{+0.08} _{-0.08}	95 ⁺⁵⁸ ₋₄₄	119 ⁺¹⁰¹ ₋₃₉	138 ⁺⁵⁷ ₋₆₄	117 ⁺⁶⁸ ₋₅₄
7800	5.99 [†]	272.99 ^{+0.05} _{-0.05}	272.02 ^{+0.05} _{-0.05}	230 ⁺²⁰³ ₋₈₉	281 ⁺⁴⁰² ₋₈₇	259 ⁺¹⁷⁷ ₋₈₉	293 ⁺²²⁸ ₋₁₂₁
7802	2.60 ± 2.20	160.18 ^{+0.05} _{-0.05}	145.97 ^{+0.05} _{-0.05}	128 ⁺⁸⁶ ₋₅₇	156 ⁺¹⁶¹ ₋₅₀	169 ⁺⁸⁰ ₋₇₁	158 ⁺⁹⁹ ₋₆₉
7803	2.29 ± 0.77	147.70 ^{+0.06} _{-0.06}	132.78 ^{+0.06} _{-0.06}	116 ⁺⁷⁶ ₋₅₃	143 ⁺¹³⁹ ₋₄₆	159 ⁺⁷² ₋₆₉	144 ⁺⁸⁷ ₋₆₄
7805	3.60 ± 3.08	197.19 ^{+0.04} _{-0.04}	186.07 ^{+0.04} _{-0.04}	161 ⁺¹¹⁹ ₋₆₈	196 ⁺²³² ₋₆₁	200 ⁺¹⁰⁸ ₋₈₅	201 ⁺¹³⁶ ₋₈₅
7810*	21.40 ± 1.16	—	—	519 ⁺⁷⁰⁰ ₋₁₆₄	671 ⁺¹³¹⁶ ₋₂₁₈	486 ⁺⁵⁵¹ ₋₁₃₅	699 ⁺⁷⁶² ₋₃₀₈
7811	1.73 [†]	123.48 ^{+0.07} _{-0.07}	107.72 ^{+0.08} _{-0.08}	95 ⁺⁵⁸ ₋₄₄	119 ⁺¹⁰¹ ₋₃₉	138 ⁺⁵⁷ ₋₆₄	117 ⁺⁶⁸ ₋₅₄
7812	1.42 [†]	108.84 ^{+0.09} _{-0.09}	92.96 ^{+0.09} _{-0.09}	82 ⁺⁴⁹ ₋₃₉	104 ⁺⁸¹ ₋₃₄	125 ⁺⁴⁹ ₋₆₀	101 ⁺⁵⁹ ₋₄₈
7813	1.93 ± 0.62	132.41 ^{+0.07} _{-0.07}	116.87 ^{+0.07} _{-0.07}	103 ⁺⁶⁴ ₋₄₈	128 ⁺¹¹⁵ ₋₇₆	145 ⁺⁶² ₋₆₆	127 ⁺⁷⁵ ₋₅₇
7814	1070.00 [†]	7493.62 ^{+97.93} _{-96.67}	13011.84 ^{+205.77} _{-202.56}	3517 ⁺³²⁶⁵ ₋₁₁₉₁	4450 ⁺¹¹⁵⁵⁰ ₋₁₈₀₅	2131 ⁺³⁰²⁸ ₋₆₈₃	4189 ⁺⁹³⁵⁸ ₋₁₇₆₅
7818	2.28 ± 0.49	147.29 ^{+0.06} _{-0.06}	132.34 ^{+0.06} _{-0.06}	116 ⁺⁷⁵ ₋₅₂	143 ⁺¹³⁹ ₋₄₆	159 ⁺⁷² ₋₆₉	143 ⁺⁸⁷ ₋₆₃
7822	1.95 ± 0.26	133.29 ^{+0.07} _{-0.07}	117.78 ^{+0.07} _{-0.07}	103 ⁺⁶⁵ ₋₄₈	128 ⁺¹¹⁶ ₋₄₂	140 ⁺⁶³ ₋₆₆	128 ⁺⁷⁶ ₋₅₈
7825	0.95 [†]	83.97 ^{+0.11} _{-0.11}	68.67 ^{+0.11} _{-0.11}	61 ⁺³⁵ ₋₃₀	80 ⁺⁵² ₋₂₇	102 ⁺³⁹ ₋₅₄	77 ⁺⁴⁵ ₋₃₈
7827	12.50 ± 7.29	436.74 ^{+0.24} _{-0.24}	470.88 ^{+0.30} _{-0.30}	373 ⁺⁴²⁷ ₋₁₂₇	470 ⁺⁸³⁰ ₋₁₄₈	375 ⁺³⁵⁰ ₋₁₁₀	492 ⁺⁴⁷² ₋₂₀₇
7830	3.99 [†]	210.58 ^{+0.03} _{-0.03}	200.90 ^{+0.04} _{-0.04}	173 ⁺¹³³ ₋₇₂	211 ⁺²⁵⁹ ₋₆₆	211 ⁺¹²⁰ ₋₈₀	217 ⁺¹⁵¹ ₋₉₁
7831	4.95 ± 0.81	241.68 ^{+0.04} _{-0.04}	235.95 ^{+0.04} _{-0.04}	202 ⁺¹⁶⁶ ₋₈₀	246 ⁺³²⁸ ₋₇₆	235 ⁺¹⁴⁷ ₋₈₄	254 ⁺¹⁸⁸ ₋₁₀₆
7835	0.85 ± 0.08	78.42 ^{+0.11} _{-0.11}	63.40 ^{+0.11} _{-0.11}	56 ⁺³³ ₋₂₈	75 ⁺⁴⁶ ₋₂₆	97 ⁺³⁷ ₋₅₂	71 ⁺⁴³ ₋₃₆
7838	2.52 ± 0.75	157.01 ^{+0.05} _{-0.05}	142.60 ^{+0.06} _{-0.06}	125 ⁺⁸³ ₋₅₆	153 ⁺¹⁵⁵ ₋₄₉	167 ⁺⁷⁸ ₋₇₁	154 ⁺⁹⁶ ₋₆₈
7840	2.81 ± 0.26	168.33 ^{+0.05} _{-0.05}	154.67 ^{+0.05} _{-0.05}	135 ⁺⁹³ ₋₅₉	165 ⁺¹⁷⁶ ₋₅₂	176 ⁺⁸⁶ ₋₇₃	167 ⁺¹⁰⁶ ₋₇₂
7841	1.58 ± 0.51	116.53 ^{+0.08} _{-0.08}	100.67 ^{+0.08} _{-0.08}	89 ⁺⁵⁴ ₋₄₂	112 ⁺⁹² ₋₃₇	131 ⁺⁵³ ₋₆₂	109 ⁺⁶⁴ ₋₅₁
7843	2.27 ± 0.59	146.88 ^{+0.06} _{-0.06}	131.91 ^{+0.06} _{-0.06}	116 ⁺⁷⁵ ₋₅₂	142 ⁺¹³⁸ ₋₄₆	158 ⁺⁷¹ ₋₆₃	143 ⁺⁸⁷ ₋₆₃
7845	17.80 ± 1.00	547.38 ^{+0.49} _{-0.49}	612.93 ^{+0.64} _{-0.64}	465 ⁺⁵⁹⁴ ₋₁₅₀	595 ⁺¹¹³² ₋₁₉₁	445 ⁺⁴⁷⁴ ₋₁₂₅	622 ⁺⁶⁵⁰ ₋₂₇₀
7855	13.30 ± 6.29	454.40 ^{+0.27} _{-0.27}	493.18 ^{+0.34} _{-0.34}	388 ⁺⁴⁵³ ₋₁₃₀	490 ⁺⁸⁷⁸ ₋₁₅₄	386 ⁺³⁷⁰ ₋₁₁₂	513 ⁺⁵⁰⁰ ₋₂₁₇
7858	1.13 ± 0.15	94.06 ^{+0.10} _{-0.10}	78.40 ^{+0.10} _{-0.10}	69 ⁺⁴⁰ ₋₃₄	90 ⁺⁶³ ₋₃₀	111 ⁺⁴³ ₋₅₇	86 ⁺⁵⁰ ₋₄₂
7862	0.57 [†]	61.03 ^{+0.13} _{-0.13}	47.30 ^{+0.12} _{-0.12}	42 ⁺²⁶ ₋₂₂	60 ⁺³¹ ₋₂₁	80 ⁺³² ₋₄₆	55 ⁺³⁷ ₋₃₀
7868*	3.11 ± 0.18	—	—	145 ⁺¹⁰³ ₋₆₃	177 ⁺¹⁹⁷ ₋₅₆	185 ⁺⁹⁵ ₋₇₅	180 ⁺¹¹⁷ ₋₇₇
7872	12.90 ± 4.67	445.62 ^{+0.26} _{-0.26}	482.07 ^{+0.32} _{-0.32}	381 ⁺⁴⁴⁰ ₋₁₂₉	480 ⁺⁸⁵⁴ ₋₁₅₁	381 ⁺³⁶⁰ ₋₁₁₁	503 ⁺⁴⁸⁶ ₋₂₁₂
7875	41.90 ± 35.30	945.78 ^{+2.09} _{-2.09}	1160.73 ^{+3.05} _{-3.04}	759 ⁺¹¹⁹⁰ ₋₂₃₃	1011 ⁺²¹²⁷ ₋₃₄₉	661 ⁺⁸⁹³ ₋₁₈₉	1036 ⁺¹²⁸⁸ ₋₄₈₈
7876	2.04 [†]	137.19 ^{+0.06} _{-0.06}	121.81 ^{+0.07} _{-0.07}	107 ⁺⁶⁸ ₋₄₉	132 ⁺¹²² ₋₆₇	150 ⁺⁶⁵ ₋₅₉	132 ⁺⁷⁹ ₋₅₉
7884*	6.63 ± 0.27	—	—	246 ⁺²²⁵ ₋₉₃	302 ⁺⁴⁴⁶ ₋₉₄	273 ⁺¹⁹⁵ ₋₉₁	315 ⁺²⁵³ ₋₁₃₀
7885	1.54 [†]	114.63 ^{+0.08} _{-0.08}	98.76 ^{+0.09} _{-0.09}	87 ⁺⁵² ₋₄₁	110 ⁺⁸⁹ ₋₃₆	130 ⁺⁵² ₋₆₂	107 ⁺⁶² ₋₅₀
7886	3.47 ± 1.10	192.61 ^{+0.04} _{-0.04}	181.03 ^{+0.04} _{-0.04}	157 ⁺¹¹⁵ ₋₆₇	191 ⁺²²² ₋₆₀	196 ⁺¹⁰⁵ ₋₈₃	195 ⁺¹³¹ ₋₈₃
7888	0.10 [†]	19.57 ^{+0.13} _{-0.13}	12.54 ^{+0.11} _{-0.10}	13 ⁺¹³ ₋₇	28 ⁺¹⁰ ₋₁₁	39 ⁺²⁸ ₋₁₅	23 ⁺³² ₋₁₅
7899	3.71 [†]	201.02 ^{+0.03} _{-0.03}	190.29 ^{+0.04} _{-0.04}	165 ⁺¹²³ ₋₆₉	201 ⁺²³⁹ ₋₆₃	203 ⁺¹¹² ₋₇₈	205 ⁺¹⁴⁰ ₋₈₇
7900	6.38 ± 1.31	284.21 ^{+0.05} _{-0.05}	285.13 ^{+0.06} _{-0.06}	240 ⁺²¹⁷ ₋₉₂	294 ⁺⁴²⁹ ₋₉₁	268 ⁺¹⁸⁸ ₋₉₀	306 ⁺²⁴³ ₋₁₂₆
7901	91.30 ± 12.40	1555.50 ^{+6.17} _{-6.15}	2075.09 ^{+9.86} _{-9.81}	1132 ⁺¹⁹⁰⁹ ₋₃₆₈	1533 ⁺³²⁴⁵ ₋₅₇₆	919 ⁺¹³⁷⁵ ₋₂₉₈	1539 ⁺²¹⁶⁹ ₋₇₆₇
7902	0.54 ± 0.37	58.48 ^{+0.13} _{-0.13}	45.01 ^{+0.12} _{-0.12}	40 ⁺²⁵ ₋₂₁	58 ⁺²⁹ ₋₂₁	78 ⁺³² ₋₄₅	53 ⁺³⁶ ₋₂₉
7903	6.63 ± 1.54	291.28 ^{+0.06} _{-0.06}	293.42 ^{+0.06} _{-0.06}	246 ⁺²²⁵ ₋₉₃	302 ⁺⁴⁴⁶ ₋₉₄	273 ⁺¹⁹⁵ ₋₉₁	315 ⁺²⁵³ ₋₁₃₀
7906*	5.36 ± 0.03	—	—	213 ⁺¹⁸¹ ₋₈₄	260 ⁺³⁵⁷ ₋₈₁	245 ⁺¹⁵⁹ ₋₈₆	270 ⁺²⁰⁴ ₋₁₁₂
7912	9.77 ± 1.57	373.13 ^{+0.14} _{-0.14}	391.82 ^{+0.16} _{-0.16}	319 ⁺³³⁵ ₋₁₁₃	397 ⁺⁶⁵⁸ ₋₁₂₃	332 ⁺²⁸⁰ ₋₁₀₂	415 ⁺³⁷³ ₋₁₇₃
7918	13.90 ± 3.72	467.39 ^{+0.30} _{-0.30}	509.68 ^{+0.38} _{-0.38}	399 ⁺⁴⁷³ ₋₁₃₃	505 ⁺⁹¹⁴ ₋₁₅₉	395 ⁺³⁸⁴ ₋₁₁₄	529 ⁺⁵²¹ ₋₂₂₅
7922	3.27 ± 2.21	185.44 ^{+0.04} _{-0.04}	173.19 ^{+0.04} _{-0.04}	150 ⁺¹⁰⁸ ₋₆₄	184 ⁺²⁰⁸ ₋₅₈	190 ⁺⁹⁹ ₋₇₆	187 ⁺¹²³ ₋₈₀
7923	0.92 ± 0.61	82.32 ^{+0.11} _{-0.11}	67.09 ^{+0.11} _{-0.11}	59 ⁺³⁵ ₋₃₀	79 ⁺⁵⁰ ₋₂₇	100 ⁺⁵³ ₋₅₃	75 ⁺⁴⁴ ₋₃₈
7924	17.20 ± 6.53	535.52 ^{+0.46} _{-0.46}	597.45 ^{+0.60} _{-0.60}	455 ⁺⁵⁷⁶ ₋₁₄₇	582 ⁺¹¹⁰⁰ ₋₁₈₆	438 ⁺⁴⁶¹ ₋₁₂₄	608 ⁺⁶³¹ ₋₂₆₃
7929*	13.20 ± 0.23	—	—	386 ⁺⁴⁵⁰ ₋₁₃₀	488 ⁺⁸⁷² ₋₁₅₄	385 ⁺³⁶⁸ ₋₁₁₂	511 ⁺⁴⁹⁶ ₋₂₁₆
7932*	2.42 ± 0.14	—	—	121 ⁺⁸⁰ ₋₅₄	149 ⁺¹⁴⁸ ₋₄₇	163 ⁺⁷⁵ ₋₇₀	149 ⁺⁹² ₋₆₆
7934	0.37 [†]	46.26 ^{+0.14} _{-0.14}	34.23 ^{+0.13} _{-0.13}	31 ⁺²¹ ₋₁₆	48 ⁺²⁰ ₋₁₇	66 ⁺³⁰ ₋₄₀	43 ⁺³⁴ ₋₂₅
7936	2.47 ± 2.12	155.02 ^{+0.05} _{-0.05}	140.49 ^{+0.06} _{-0.06}	123 ⁺⁸¹ ₋₅₅	151 ⁺¹⁵² ₋₄₈	165 ⁺⁷⁷ ₋₇₀	152 ⁺⁹⁴ ₋₆₇

Continued on next page

Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
7938*	3.35 ± 0.37	—	—	153 ⁺¹¹¹ ₋₆₅	187 ⁺²¹⁴ ₋₅₉	193 ⁺¹⁰¹ ₋₇₆	190 ⁺¹²⁶ ₋₈₁
7939	2.18 ± 0.18	143.13 ^{+0.06} _{-0.06}	127.99 ^{+0.07} _{-0.07}	112 ⁺⁷² ₋₅₁	139 ⁺¹³² ₋₄₄	155 ⁺⁶⁹ ₋₆₈	138 ⁺⁸⁴ ₋₆₂
7942	0.86 [†]	78.95 ^{+0.11} _{-0.11}	63.90 ^{+0.11} _{-0.11}	56 ⁺³³ ₋₂₈	76 ⁺⁴⁶ ₋₂₆	97 ⁺³⁷ ₋₅₂	72 ⁺⁴³ ₋₃₇
7943	22.10 ± 2.97	628.52 ^{+0.74} _{-0.74}	720.28 ^{+0.99} _{-0.99}	529 ⁺⁷¹⁹ ₋₁₆₇	685 ⁺¹³⁵⁰ ₋₂₂₃	493 ⁺⁵⁶⁵ ₋₁₃₇	713 ⁺⁷⁸³ ₋₃₁₅
7948*	1.35 ± 0.30	—	—	79 ⁺⁴⁷ ₋₃₈	101 ⁺⁷⁷ ₋₃₃	121 ⁺⁴⁸ ₋₆₀	98 ⁺⁵⁶ ₋₄₇
7952	3.37 ± 3.05	189.05 ^{+0.04} _{-0.04}	177.13 ^{+0.04} _{-0.04}	154 ⁺¹¹¹ ₋₆₆	187 ⁺²¹⁵ ₋₅₉	193 ⁺¹⁰² ₋₇₆	191 ⁺¹²⁷ ₋₈₁
7954*	3.69 ± 0.06	—	—	164 ⁺¹²² ₋₆₉	200 ⁺²³⁸ ₋₆₃	202 ⁺¹¹¹ ₋₈₆	205 ⁺¹³⁹ ₋₈₆
7963	34.50 ± 7.39	835.37 ^{+1.55} _{-1.55}	1004.11 ^{+2.21} _{-2.21}	682 ⁺¹⁰³² ₋₂₁₀	902 ⁺¹⁸⁷³ ₋₃₀₆	606 ⁺⁷⁸⁵ ₋₁₇₀	930 ⁺¹¹¹⁶ ₋₄₃₀
7968	0.60 ± 0.39	62.64 ^{+0.13} _{-0.13}	48.77 ^{+0.12} _{-0.12}	43 ⁺²⁶ ₋₂₂	61 ⁺³² ₋₂₂	82 ⁺³² ₋₄₇	57 ⁺³⁷ ₋₃₁
7969	0.73 ± 0.08	71.03 ^{+0.12} _{-0.12}	56.48 ^{+0.12} _{-0.12}	50 ⁺³⁰ ₋₂₆	69 ⁺³⁹ ₋₂₄	90 ⁺⁴⁰ ₋₅₀	64 ⁺⁴⁰ ₋₃₄
7970	2.23 ± 1.66	145.22 ^{+0.06} _{-0.06}	130.17 ^{+0.06} _{-0.06}	114 ⁺⁷⁴ ₋₅₂	141 ⁺¹³⁵ ₋₄₅	157 ⁺⁷⁰ ₋₆₉	141 ⁺⁸⁵ ₋₆₃
7973	5.61 ± 3.48	261.79 ^{+0.04} _{-0.04}	259.04 ^{+0.04} _{-0.04}	220 ⁺¹⁸⁹ ₋₈₆	269 ⁺³⁷⁵ ₋₈₃	251 ⁺¹⁶⁶ ₋₈₇	279 ⁺²¹³ ₋₁₁₅
7976*	5.18 ± 0.22	—	—	208 ⁺¹⁷⁴ ₋₈₂	254 ⁺³⁴⁴ ₋₇₉	241 ⁺¹⁵⁴ ₋₈₅	263 ⁺¹⁹⁷ ₋₁₀₉
7979	48.20 ± 12.50	1034.31 ^{+2.57} _{-2.57}	1288.56 ^{+3.82} _{-3.81}	818 ⁺¹³¹¹ ₋₂₅₂	1094 ⁺²³¹⁸ ₋₃₈₄	703 ⁺⁹⁷⁶ ₋₂₀₅	1118 ⁺¹⁴²³ ₋₅₃₄
7980	5.98 ± 2.57	272.70 ^{+0.05} _{-0.05}	271.68 ^{+0.05} _{-0.05}	230 ⁺²⁰³ ₋₈₉	281 ⁺⁴⁰¹ ₋₈₇	259 ⁺¹⁷⁶ ₋₈₉	292 ⁺²²⁸ ₋₁₂₁
7984	7.12 ± 0.43	304.85 ^{+0.07} _{-0.07}	309.45 ^{+0.07} _{-0.07}	258 ⁺²⁴³ ₋₉₈	318 ⁺⁴⁵⁰ ₋₁₃₇	283 ⁺¹³⁷ ₋₉₃	332 ⁺²⁷² ₋₁₃₇
7987	12.30 ± 0.74	432.27 ^{+0.23} _{-0.23}	465.24 ^{+0.29} _{-0.28}	369 ⁺⁴²⁰ ₋₁₂₆	465 ⁺⁸¹⁸ ₋₁₄₆	372 ⁺³⁴⁵ ₋₁₀₉	487 ⁺⁴⁶⁵ ₋₂₀₅
7988	23.00 ± 5.37	644.75 ^{+0.79} _{-0.79}	742.05 ^{+1.07} _{-1.07}	541 ⁺⁷⁴⁴ ₋₁₇₀	702 ⁺¹³⁹³ ₋₂₂₉	503 ⁺⁵⁸³ ₋₁₄₀	731 ⁺⁸⁰⁹ ₋₃₂₅
7989	6.87 ± 1.13	297.97 ^{+0.06} _{-0.06}	301.31 ^{+0.07} _{-0.07}	252 ⁺²³⁴ ₋₉₅	310 ⁺⁴⁶³ ₋₉₆	278 ⁺²⁰¹ ₋₉₂	323 ⁺²⁶² ₋₁₃₃
7992	0.69 ± 0.52	68.77 ^{+0.12} _{-0.12}	54.38 ^{+0.12} _{-0.12}	48 ⁺²⁹ ₋₂₅	67 ⁺³⁷ ₋₂₃	88 ⁺³⁴ ₋₄₉	62 ⁺³⁹ ₋₃₃
7994*	7.49 ± 0.16	—	—	267 ⁺²⁵⁶ ₋₉₉	329 ⁺⁵⁰⁶ ₋₁₀₂	290 ⁺²¹⁹ ₋₉₄	344 ⁺²⁸⁶ ₋₁₄₂
7995	33.90 ± 12.00	826.06 ^{+1.51} _{-1.51}	991.05 ^{+2.15} _{-2.15}	676 ⁺¹⁰¹⁸ ₋₂₀₈	892 ⁺¹⁸⁵⁰ ₋₃₀₂	601 ⁺⁷⁷⁵ ₋₄₂₅	920 ⁺¹¹⁰¹ ₋₄₂₅
7997	4.01 ± 0.59	211.26 ^{+0.03} _{-0.03}	201.65 ^{+0.04} _{-0.04}	174 ⁺¹³³ ₋₇₂	212 ⁺¹⁶¹ ₋₆₆	211 ⁺¹⁵¹ ₋₈₀	218 ⁺¹⁵¹ ₋₉₁
7998	0.57 ± 0.25	60.48 ^{+0.13} _{-0.13}	46.81 ^{+0.12} _{-0.12}	42 ⁺²⁶ ₋₂₂	60 ⁺³⁰ ₋₂₁	80 ⁺³² ₋₄₆	55 ⁺³⁷ ₋₃₀
7999	8.50 ± 6.42	341.38 ^{+0.10} _{-0.10}	353.16 ^{+0.11} _{-0.11}	291 ⁺²⁹¹ ₋₁₀₅	360 ⁺⁵⁷⁴ ₋₁₁₂	309 ⁺²⁴⁶ ₋₉₈	376 ⁺³²⁵ ₋₁₅₆
8001	3.98 ± 0.67	210.25 ^{+0.03} _{-0.03}	200.53 ^{+0.04} _{-0.04}	173 ⁺¹³² ₋₇₂	211 ⁺²⁵⁹ ₋₆₆	210 ⁺¹¹⁹ ₋₈₀	216 ⁺¹⁵⁰ ₋₉₁
8004	3.75 ± 2.64	202.40 ^{+0.03} _{-0.03}	191.82 ^{+0.04} _{-0.04}	166 ⁺¹²⁴ ₋₆₉	202 ⁺²⁴² ₋₆₃	204 ⁺¹¹³ ₋₇₉	207 ⁺¹⁴¹ ₋₈₇
8008*	11.10 ± 0.24	—	—	346 ⁺³⁸⁰ ₋₁₂₀	433 ⁺⁷⁴³ ₋₁₃₅	353 ⁺³¹⁵ ₋₁₀₆	454 ⁺⁴²¹ ₋₁₉₀
8009	2.90 ± 1.02	171.75 ^{+0.04} _{-0.04}	158.35 ^{+0.05} _{-0.05}	138 ⁺¹⁸² ₋₆₀	169 ⁺¹⁸² ₋₅₃	179 ⁺¹⁰⁹ ₋₇₄	171 ⁺¹⁰⁹ ₋₇₄
8012	1.39 ± 0.50	107.37 ^{+0.09} _{-0.09}	91.49 ^{+0.09} _{-0.09}	81 ⁺⁴⁸ ₋₃₉	103 ⁺⁷⁹ ₋₃₄	123 ⁺⁴⁹ ₋₆₀	100 ⁺⁵⁸ ₋₄₇
8018	11.00 ± 6.27	402.50 ^{+0.18} _{-0.18}	428.05 ^{+0.22} _{-0.22}	344 ⁺³⁷⁷ ₋₁₁₉	430 ⁺⁷³⁷ ₋₁₃₅	352 ⁺³¹² ₋₁₀₆	451 ⁺⁴¹⁸ ₋₁₈₉
8019	1.18 ± 0.46	96.70 ^{+0.10} _{-0.10}	80.97 ^{+0.10} _{-0.10}	71 ⁺⁴² ₋₃₅	92 ⁺⁶⁶ ₋₃₁	114 ⁺⁴⁴ ₋₅₇	89 ⁺⁵¹ ₋₄₃
8022	2.37 ± 0.20	150.98 ^{+0.05} _{-0.05}	136.22 ^{+0.06} _{-0.06}	119 ⁺⁷⁸ ₋₅₄	147 ⁺¹⁴⁵ ₋₄₇	161 ⁺⁷⁴ ₋₇₀	147 ⁺⁹⁰ ₋₆₅
8026	2.76 ± 0.52	166.41 ^{+0.05} _{-0.05}	152.61 ^{+0.05} _{-0.05}	133 ⁺⁹¹ ₋₅₉	163 ⁺¹⁷² ₋₅₂	175 ⁺⁸⁵ ₋₇₂	165 ⁺¹⁰⁴ ₋₇₂
8027	52.20 ± 4.77	1088.35 ^{+2.89} _{-2.88}	1367.51 ^{+4.32} _{-4.31}	853 ⁺¹³⁸² ₋₂₆₄	1144 ⁺²⁴³⁰ ₋₄₀₅	728 ⁺¹⁰²⁴ ₋₂₁₄	1166 ⁺¹⁵⁰⁴ ₋₅₆₀
8030	2.74 ± 0.27	165.64 ^{+0.05} _{-0.05}	151.79 ^{+0.05} _{-0.05}	132 ⁺⁹⁰ ₋₅₈	162 ⁺¹⁷¹ ₋₅₁	174 ⁺⁸⁴ ₋₇₂	164 ⁺¹⁰⁴ ₋₇₁
8035	21.10 ± 12.70	610.20 ^{+0.68} _{-0.68}	695.83 ^{+0.91} _{-0.90}	514 ⁺⁶⁹¹ ₋₁₆₃	665 ⁺¹³⁰² ₋₂₁₆	483 ⁺⁵⁴⁴ ₋₁₃₄	693 ⁺⁷⁵³ ₋₃₀₅
8036	0.72 ± 0.31	70.53 ^{+0.12} _{-0.12}	56.02 ^{+0.12} _{-0.12}	50 ⁺²⁹ ₋₂₅	68 ⁺³⁹ ₋₂₄	89 ⁺³⁴ ₋₄₉	64 ⁺⁴⁰ ₋₃₃
8039	1.06 [†]	90.30 ^{+0.10} _{-0.10}	74.75 ^{+0.11} _{-0.11}	66 ⁺³⁹ ₋₃₃	86 ⁺⁵⁸ ₋₂₉	108 ⁺⁴¹ ₋₅₆	83 ⁺⁴⁸ ₋₄₁
8041	13.10 [†]	450.02 ^{+0.27} _{-0.27}	487.63 ^{+0.33} _{-0.33}	384 ⁺⁴⁴⁷ ₋₁₂₉	485 ⁺⁸⁶⁶ ₋₁₅₃	384 ⁺³⁶⁵ ₋₁₁₂	508 ⁺⁴⁹³ ₋₂₁₅
8045	1.94 ± 1.11	132.85 ^{+0.07} _{-0.07}	117.33 ^{+0.07} _{-0.07}	103 ⁺⁶⁵ ₋₄₈	128 ⁺¹¹⁵ ₋₄₁	146 ⁺⁶³ ₋₆₆	127 ⁺⁷⁵ ₋₅₈
8047	22.40 ± 4.99	633.96 ^{+0.75} _{-0.75}	727.56 ^{+1.02} _{-1.01}	533 ⁺⁷²⁸ ₋₁₆₈	691 ⁺¹³⁶⁵ ₋₂₂₅	497 ⁺⁵⁷¹ ₋₁₃₈	719 ⁺⁷⁹² ₋₃₁₈
8049	1.88 ± 0.14	130.21 ^{+0.07} _{-0.07}	114.61 ^{+0.07} _{-0.07}	101 ⁺⁶³ ₋₄₇	125 ⁺¹¹¹ ₋₄₁	144 ⁺⁶¹ ₋₆₅	124 ⁺⁷³ ₋₅₆
8050	0.62 ± 0.30	64.11 ^{+0.13} _{-0.13}	50.10 ^{+0.12} _{-0.12}	44 ⁺²⁷ ₋₂₃	63 ⁺³³ ₋₂₂	83 ⁺³³ ₋₄₇	58 ⁺³⁸ ₋₃₁
8054	3.37 ± 1.44	189.05 ^{+0.04} _{-0.04}	177.13 ^{+0.04} _{-0.04}	154 ⁺¹¹¹ ₋₆₆	187 ⁺²¹⁵ ₋₅₉	193 ⁺¹⁰² ₋₇₆	191 ⁺¹²⁷ ₋₈₁
8059	5.08 ± 1.06	245.71 ^{+0.04} _{-0.04}	240.56 ^{+0.04} _{-0.04}	205 ⁺¹⁷¹ ₋₈₂	250 ⁺³³⁷ ₋₇₈	238 ⁺¹⁵¹ ₋₈₅	259 ⁺¹⁹³ ₋₁₀₈
8061	32.40 ± 5.99	802.52 ^{+1.41} _{-1.40}	958.16 ^{+1.99} _{-1.98}	659 ⁺⁹⁸³ ₋₂₀₃	868 ⁺¹⁷⁹⁴ ₋₂₉₂	589 ⁺⁷⁵¹ ₋₁₆₅	897 ⁺¹⁰⁶⁴ ₋₄₁₂
8062	9.74 ± 1.96	372.40 ^{+0.14} _{-0.14}	390.92 ^{+0.16} _{-0.16}	318 ⁺³³⁴ ₋₁₁₂	396 ⁺⁶⁵⁶ ₋₁₂₃	331 ⁺²⁸⁰ ₋₁₀₂	414 ⁺³⁷¹ ₋₁₇₂
8063	8.17 ± 0.87	332.85 ^{+0.09} _{-0.09}	342.88 ^{+0.10} _{-0.10}	283 ⁺²⁸⁰ ₋₁₀₃	350 ⁺⁵⁵² ₋₁₀₉	303 ⁺²³⁷ ₋₉₇	366 ⁺³¹² ₋₁₅₁

Continued on next page

Trigger ^a	HR_H ^b Hardness	Mean[$E_{p,obs}$] ^c OLS(Y X)	Mean[$E_{p,obs}$] ^d OLS bisector	Mode[$E_{p,obs}$] ^e Band	Mode[$E_{p,obs}$] ^f COMP(CPL)	Mode[$E_{p,obs}$] ^g SBPL	Mean[$E_{p,obs}$] ^h Expected
8064	2.12 ± 0.55	$140.60^{+0.06}_{-0.06}$	$125.35^{+0.07}_{-0.07}$	110^{+70}_{-50}	136^{+128}_{-44}	153^{+67}_{-68}	136^{+82}_{-61}
8066	1.35 ± 0.66	$105.38^{+0.09}_{-0.09}$	$89.52^{+0.09}_{-0.09}$	79^{+47}_{-38}	101^{+77}_{-33}	121^{+48}_{-60}	98^{+56}_{-47}
8072	10.80 ± 5.49	$397.81^{+0.17}_{-0.17}$	$422.23^{+0.21}_{-0.21}$	340^{+370}_{-118}	425^{+724}_{-133}	349^{+307}_{-105}	445^{+411}_{-186}
8073	6.03 ± 0.98	$274.15^{+0.05}_{-0.05}$	$273.38^{+0.05}_{-0.05}$	231^{+204}_{-89}	283^{+404}_{-88}	260^{+178}_{-89}	294^{+230}_{-121}
8075	2.39 ± 0.17	$151.79^{+0.05}_{-0.05}$	$137.08^{+0.06}_{-0.06}$	120^{+79}_{-54}	148^{+146}_{-47}	162^{+75}_{-70}	148^{+91}_{-65}
8076	40.30 ± 24.30	$922.55^{+1.97}_{-1.97}$	$1127.50^{+2.86}_{-2.86}$	743^{+1157}_{-228}	988^{+2075}_{-340}	650^{+871}_{-185}	1014^{+1252}_{-476}
8077	2.85^\dagger	$169.85^{+0.04}_{-0.04}$	$156.31^{+0.05}_{-0.05}$	136^{+94}_{-60}	167^{+178}_{-53}	177^{+87}_{-73}	169^{+108}_{-73}
8079	35.90 ± 8.37	$856.87^{+1.65}_{-1.65}$	$1034.35^{+2.36}_{-2.36}$	697^{+1063}_{-214}	923^{+1924}_{-314}	617^{+806}_{-174}	951^{+1150}_{-441}
8082	12.00 ± 3.43	$425.50^{+0.22}_{-0.22}$	$456.75^{+0.27}_{-0.27}$	364^{+410}_{-124}	457^{+799}_{-143}	367^{+338}_{-109}	479^{+454}_{-201}
8084	1.32 ± 0.14	$103.88^{+0.09}_{-0.09}$	$88.04^{+0.09}_{-0.09}$	77^{+46}_{-38}	99^{+75}_{-33}	120^{+47}_{-59}	96^{+56}_{-46}
8085	21.30 ± 1.94	$613.89^{+0.69}_{-0.69}$	$700.74^{+0.92}_{-0.92}$	517^{+697}_{-164}	669^{+1312}_{-217}	485^{+549}_{-135}	697^{+759}_{-307}
8086	7.77 ± 1.00	$322.35^{+0.08}_{-0.08}$	$330.28^{+0.09}_{-0.09}$	274^{+266}_{-101}	338^{+525}_{-105}	296^{+226}_{-95}	353^{+297}_{-146}
8087*	16.40 ± 0.46	—	—	442^{+552}_{-144}	564^{+1056}_{-180}	428^{+443}_{-121}	590^{+605}_{-254}
8089	24.10 ± 8.32	$664.28^{+0.86}_{-0.86}$	$768.37^{+1.17}_{-1.17}$	556^{+774}_{-174}	723^{+1445}_{-237}	514^{+604}_{-143}	752^{+841}_{-336}
8097	51.20 ± 17.10	$1074.99^{+2.81}_{-2.80}$	$1347.92^{+4.20}_{-4.18}$	844^{+1365}_{-261}	1132^{+2402}_{-400}	722^{+1012}_{-212}	1154^{+1484}_{-554}
8098*	1.92 ± 0.15	—	—	102^{+64}_{-47}	127^{+114}_{-66}	145^{+62}_{-75}	126^{+75}_{-57}
8099	1.36 ± 0.18	$105.88^{+0.09}_{-0.09}$	$90.02^{+0.09}_{-0.09}$	79^{+47}_{-38}	101^{+77}_{-34}	122^{+48}_{-60}	98^{+57}_{-47}
8101*	10.40 ± 0.35	—	—	332^{+356}_{-116}	414^{+699}_{-129}	342^{+297}_{-104}	434^{+396}_{-181}
8102	1.11 ± 0.72	$93.00^{+0.10}_{-0.10}$	$77.36^{+0.10}_{-0.10}$	68^{+40}_{-34}	89^{+62}_{-30}	110^{+42}_{-56}	85^{+49}_{-42}
8104	16.40 ± 1.98	$519.47^{+0.42}_{-0.42}$	$576.60^{+0.54}_{-0.54}$	442^{+552}_{-144}	564^{+1056}_{-180}	428^{+443}_{-121}	590^{+605}_{-254}
8105	3.31 ± 1.17	$186.89^{+0.04}_{-0.04}$	$174.77^{+0.04}_{-0.04}$	152^{+109}_{-65}	185^{+211}_{-58}	192^{+100}_{-76}	189^{+125}_{-80}
8110	16.40 ± 1.67	$519.47^{+0.42}_{-0.42}$	$576.60^{+0.54}_{-0.54}$	442^{+552}_{-144}	564^{+1056}_{-180}	428^{+443}_{-121}	590^{+605}_{-254}
8111	3.91 ± 0.38	$207.88^{+0.03}_{-0.03}$	$197.89^{+0.03}_{-0.03}$	171^{+130}_{-71}	208^{+254}_{-65}	209^{+117}_{-79}	214^{+148}_{-90}
8112	1.48 ± 1.05	$111.76^{+0.08}_{-0.08}$	$95.88^{+0.09}_{-0.09}$	84^{+51}_{-40}	107^{+85}_{-35}	127^{+51}_{-61}	104^{+60}_{-49}
8116	4.21 ± 0.33	$217.93^{+0.03}_{-0.03}$	$209.11^{+0.04}_{-0.04}$	180^{+140}_{-74}	219^{+275}_{-68}	217^{+126}_{-81}	226^{+159}_{-94}
8120	28.30 ± 3.40	$736.08^{+1.13}_{-1.13}$	$866.18^{+1.57}_{-1.56}$	610^{+884}_{-189}	800^{+1629}_{-266}	554^{+681}_{-154}	828^{+957}_{-376}
8121	0.80 ± 0.14	$75.62^{+0.12}_{-0.12}$	$60.76^{+0.12}_{-0.12}$	54^{+32}_{-27}	73^{+43}_{-25}	94^{+36}_{-51}	69^{+42}_{-35}

NOTE. —

* All $E_{p,obs}$ estimates are in units of KeV. Overall, we recommend the use of either $E_{p,obs}$ estimates from OLS($E_{p,obs}|HR_H$) (column 3) or the expected $E_{p,obs}$ estimates from the simulation (column 8) together with the 90% upper and lower prediction intervals given in column (8). $E_{p,obs}$ by the OLS-bisector (column 4) might be useful in cases where both HR_H and $E_{p,obs}$ need to be treated impartially (e.g. Shahmoradi & Nemiroff 2009a; Isobe et al. 1990). The model-dependent simulation-based estimates of $E_{p,obs}$ (columns 5 & 6 & 7) might be used only in cases where the best fit spectral model of the GRB is known independently. In general, the 90% lower and upper prediction intervals on the estimated $E_{p,obs}$ *should always* be reported and considered in analyses.

^a Burst's trigger number as reported in the BATSE catalog. Triggers that are labeled by * in column (1), represent GRBs used to derive the regression lines in §2.2. Therefore, their $E_{p,obs}$ estimates from the linear regressions are not given.

^b HR_H represents hardness Ratio as defined in §2.2. No attempt was made to keep the significant digits. Values are rounded off at the 2nd decimal places. For 262 GRBs marked by † in column (2), the uncertainties in the fluences are greater than their reported fluences in BATSE catalog. Therefore, for these GRBs, the error propagation also results in HR_H uncertainties that are larger than the value of HR_H . In these cases, the uncertainties on HR_H are not reported.

^c Mean response of OLS($E_{p,obs}|HR_H$) (Eqn. (1)) with the corresponding 1σ uncertainties on the mean response. No attempt was made to keep the significant digits. Values are rounded off at the 2nd decimal places.

^d Mean response of OLS-bisector (Eqn. (3)) with the corresponding 1σ uncertainties on the mean response. No attempt was made to keep the significant digits. Values are rounded off at the 2nd decimal places.

^e Most probable $E_{p,obs}$ with 90% Prediction Interval (PI) derived from simulation in case of the Band model as the best spectral fit.

^f Most probable $E_{p,obs}$ with 90% PI derived from simulation in case of the COMP (CPL) model as the best spectral fit.

^g Most probable $E_{p,obs}$ with 90% PI derived from simulation in case of the SBPL model as the best spectral fit.

^h The weighted average of $E_{p,obs}$ of the three GRB models with 90% PI derived from simulation according to Eqns. (20)-(23).